API Well Number: 43013530970000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
Farnsworth 3-1C5

2. TYPE OF WORK
DRILL NEW WELL ● REENTER P&A WELL ○ DEEPEN WELL ○

3. FIELD OR WILDCAT
ALTAMONT

4. TYPE OF WELL
Oil Well Coalbed Methane Well: NO

5. UNIT or COMMUNITIZATION AGREEMENT NAME

6. NAME OF OPERATOR
EP ENERGY E&P COMPANY, L.P.

7. OPERATOR PHONE
713 997-5038

8. ADDRESS OF OPERATOR
1001 Louisiana, Houston, TX, 77002

9. OPERATOR E-MAIL
maria.gomez@epenergy.com

10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)
Fee

11. MINERAL OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ●

12. SURFACE OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ●

13. NAME OF SURFACE OWNER (if box 12 = 'fee')
Farrell and Jolene C. Farnsworth Family Trust

14. SURFACE OWNER PHONE (if box 12 = 'fee')

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')

16. SURFACE OWNER E-MAIL (if box 12 = 'fee')

17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')

18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS
YES ○ (Submit Commingling Application) NO ●

19. SLANT
VERTICAL ● DIRECTIONAL ○ HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	1978 FSL 1534 FWL	NESW	1	3.0 S	5.0 W	U
Top of Uppermost Producing Zone	1978 FSL 1534 FWL	NESW	1	3.0 S	5.0 W	U
At Total Depth	1978 FSL 1534 FWL	NESW	1	3.0 S	5.0 W	U

21. COUNTY
DUCHESNE

22. DISTANCE TO NEAREST LEASE LINE (Feet)
1534

23. NUMBER OF ACRES IN DRILLING UNIT
640

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
3000

26. PROPOSED DEPTH
MD: 12400 TVD: 12400

27. ELEVATION - GROUND LEVEL
5867

28. BOND NUMBER
400JU0708

29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE
Duchesne City

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Cond	17.5	13.375	0 - 700	54.5	J-55 ST&C	0.0	Class G	879	1.15	15.8
Surf	12.25	9.625	0 - 2200	40.0	N-80 LT&C	0.0	Type V	218	3.18	11.0
							Class G	267	1.3	14.3
I1	8.75	7	0 - 9350	29.0	HCP-110 LT&C	10.5	Class G	548	1.91	12.5
							Class G	268	1.64	13.0
L1	6.125	5	9150 - 12400	18.0	HCP-110 LT&C	13.2	Class G	193	1.47	14.2

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ COMPLETE DRILLING PLAN
- ☑ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)
- ☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
- ☐ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)
- ☑ TOPOGRAPHICAL MAP

NAME Maria S. Gomez | **TITLE** Principal Regulatory Analyst | **PHONE** 713 997-5038

SIGNATURE | **DATE** 08/10/2014 | **EMAIL** maria.gomez@epenergy.com

API NUMBER ASSIGNED
43013530970000

APPROVAL

Permit Manager

RECEIVED: October 09, 2014

Farnsworth 3-1C5
Sec. 1, T3S, R5W
DUCHESNE COUNTY, UT

EP ENERGY E&P COMPANY, L.P.

DRILLING PROGRAM

1. **Estimated Tops of Important Geologic Markers**

Formation	Depth
Green River (GRRV)	4,402' TVD
Green River (GRTN1)	5,202' TVD
Mahogany Bench	6,182' TVD
L. Green River	7,642' TVD
Wasatch	9,292' TVD
T.D. (Permit)	12,400' TVD

2. **Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:**

Substance	Formation	Depth
	Green River (GRRV)	4,402' MD/TVD
	Green River (GRTN1)	5,202' MD/TVD
	Mahogany Bench	6,182' MD/TVD
Oil	L. Green River	7,642' MD/TVD
Oil	Wasatch	9,292' MD/TVD

3. **Pressure Control Equipment:** (Schematic Attached)

A 4.5" by 20.0" rotating head on structural pipe from surface to 700' MD/TVD. A Diverter System from 700' MD/TVD to 2,200' MD/TVD on Conductor. A 10M BOP stack w/ rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams from 2,200' MD/TVD to 9,350' MD/TVD. A 10M BOP stack w/ rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams from 9,350' MD/TVD to TD (12,400' MD/TVD).

The BOPE and related equipment will meet the requirements of the 5M and 10M system.

OPERATORS MINIMUM SPECIFICATIONS FOR BOPE:

The surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" 5M x 11" 10M spool, 11" x 10M psi BOP and 5M psi annular will be nipped up on the surface casing and tested to 250 psi low test / 3,000 psi high test for 10 minutes each prior to drilling out. The surface casing will be tested to 1,000 psi. for 30 mins. Intermediate casing will be tested to the

RECEIVED: August 10, 2014

greater of 1,500 psi or 0.22 psi/ft. The choke manifold equipment, upper Kelly cock and floor safety valves will be tested to 5M psi. The annular preventer will be tested to 250 psi low test / 4,000 psi high test. The 10M BOP will be installed with rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams from surface shoe to TD. The BOPE will be hydraulically operated.

In addition, the BOP equipment will be tested after running intermediate casing, after any repairs to the equipment and at least once every 30 days. Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew.

Statement on Accumulator System and Location of Hydraulic Controls:

Precision Rig # 404 is expected to be used to drill the proposed well. Operations will commence after approval of this application. Manual and/or hydraulic controls will be in compliance with 5M and 10M psi systems.

Auxiliary Equipment:

A) Pason Gas Monitoring 2,200' - TD
B) Mud logger with gas monitor – 2,200' to TD
C) Choke manifold with one manual and one hydraulic operated choke
D) Full opening floor valve with drill pipe thread
E) Upper and lower Kelly cock
F) Shaker, de-sander and centrifuge

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Wellbore Diagram.
All casing will meet or exceed the following design safety factors:

- Burst = 1.00
- Collapse = 1.125
- Tension = 1.2 (including 100k# overpull)

Cement design calculations for intermediate and production hole will be based on minimum 10% excess over gauge hole volumes. Actual volumes pumped will be a minimum of 10% excess over caliper volume to designed tops of cement for any section logged. A minimum of 50% excess over gauge volume will be pumped on surface casing.

5. **Drilling Fluids Program:**

Proposed Mud Program:

Interval	Type	Mud Weight
Surface	Air	Air
Intermediate	WBM	9.0 – 10.5
Production	WBM	11.0 – 13.2

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Anticipated mud weights are based on actual offset well bottom-hole pressure data. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Visual mud monitoring equipment will be utilized.

6. **Evaluation Program**:

Logs:
Mud Log: 2,200' MD/TVD – TD
Open Hole Logs: Gamma Ray, Neutron-Density, Resistivity, Sonic, from surface casing shoe to TD.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 12,400' TVD equals approximately 8,511 psi. This is calculated based on a 0.6864 psi/ft gradient (13.2 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 5,783 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

Maximum anticipated surface pressure based on frac gradient at 7" casing shoe is 0.8 psi/ft at 9,350' TVD = 7,480 psi

BOPE and casing design will be based on the lesser of the two MASPs which is 5,783 psi.

8. **OPERATOR REQUESTS THAT THE PROPOSED WELL BE PLACED ON CONFIDENTIAL STATUS.**

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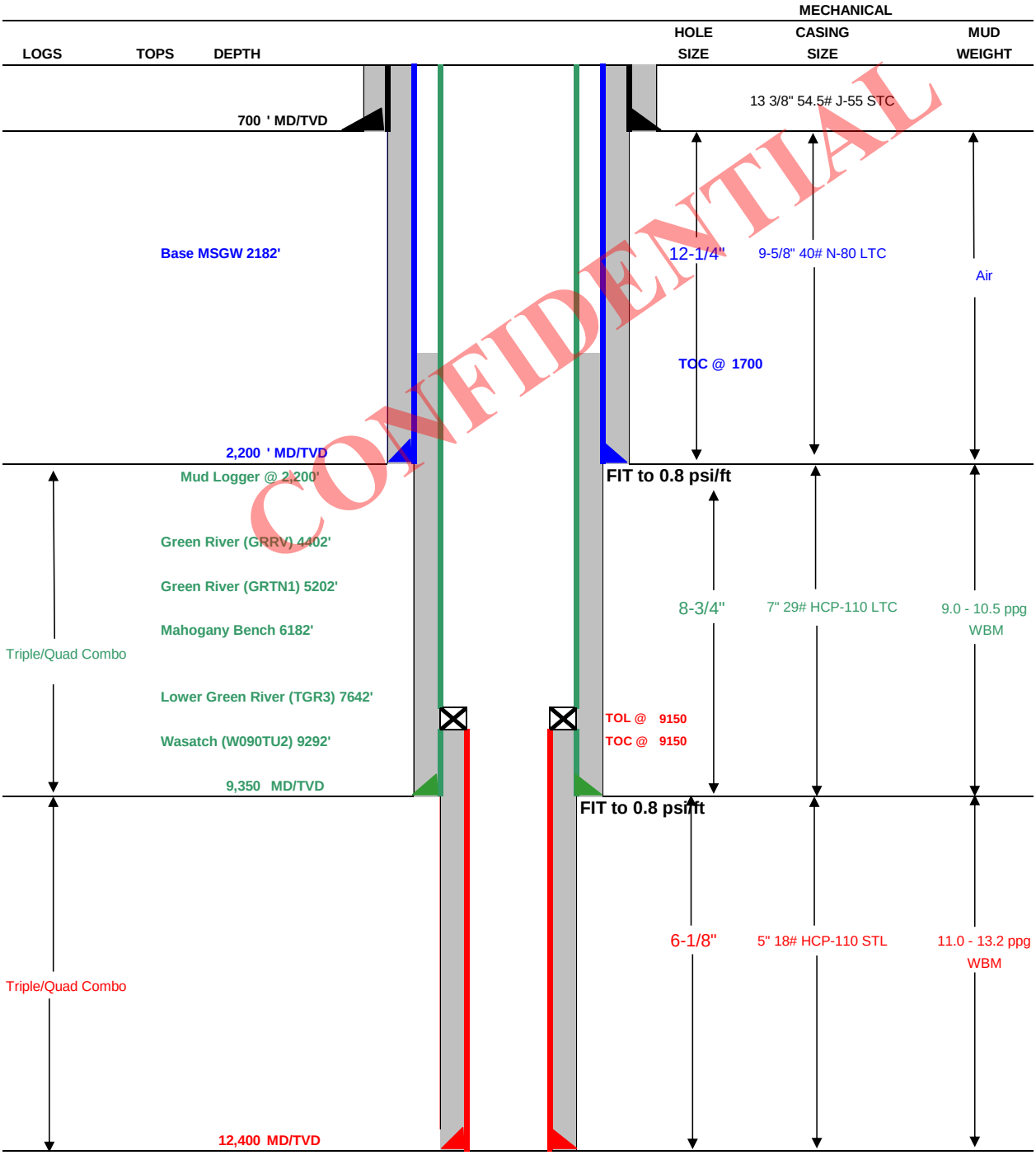
EP ENERGY

Drilling Schematic

Company Name:	EP ENERGY	**Date:**	July 11, 2014
Well Name:	Farnsworth 3-1C5	**TD:**	12,400
Field, County, State:	Altamont, Duchesne, Utah	**AFE #:**	TBD
Surface Location:	Sec 1 T3S R5W 1978' FSL 1534' FWL	**BHL:**	Straight Hole
Objective Zone(s):	Green River, Wasatch	**Elevation:**	5864.8
Rig:	Precision 404	**Spud (est.):**	TBD
BOPE Info:	Diverter System from 700' to 2,200' . 11 10M BOPE w/ rotating head & 5M annular from 2,200' to 9,350' . 11 10M BOPE w/ rotating head, spacer spool, 5M annular, flex rams, blind rams, single w/ flex rams from 9,350' to TD		



DRILLING PROGRAM

CASING PROGRAM	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0	700	54.5	J-55	STC	2,740	1,130	514
SURFACE	9-5/8"	0	2200	40.00	N-80	LTC	5,750	3,090	737
INTERMEDIATE	7"	0	9350	29.00	HCP-110	LTC	11,220	9,750	797
PRODUCTION LINER	5"	9150	12400	18.00	HCP-110	STL	13,940	15,450	495

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR		700	Class G + 3% CACL2	879	100%	15.8 ppg	1.15
SURFACE	Lead	1,500	EXTENDACEM SYSTEM: Type V Cement + 5 lbm/sk Silicalite Compacted + 0.25 lbm/sk Kwik Seal + 0.125 lbm/sk Poly-E-Flake + 8% Bentonite + 0.3% D-AIR 5000	218	75%	11.0 ppg	3.18
	Tail	700	HALCEM SYSTEM: Class G Cement + 3 lbm/sk Silicalite Compacted + 1% Salt + 0.3% Econolite + 0.25 lbm/sk Poly-E-Flake + 0.25 lbm/sk Kwik Seal + 0.3% D-AIR 5000	267	50%	14.3 ppg	1.30
INTERMEDIATE	Lead	5,450	EXTENDACEM SYSTEM: Class G Cement + 6% Bentonite + 0.2% Econolite + 0.3% Versaset + 0.75% HR-5 + 0.3% Super CBL + 0.2% Halad-322 + 0.125 lb/sk Poly-E-Flake	548	30%	12.5 ppg	1.91
	Tail	2,200	EXPANDACEM SYSTEM: Class G Cement + 4% Bentonite + 0.25 Poly-E-Flake + 0.1% Halad-413 + 5 lb/sk Silicalite Compacted + 0.15% SA-1015 + 0.3% HR-5	268	30%	13.0 ppg	1.64
PRODUCTION LINER		3,250	EXTENDACEM SYSTEM: Class G Cement + 0.2% Super CBL + 0.55% SCR-100 + 0.3% Halad-413 + 0.125 lbm/sk Poly-E-Flake + 3 lbm/sk Silicalite Compacted + 20% SS-200 + 0.10% SA-1015	193	25%	14.2 ppg	1.47

FLOAT EQUIPMENT & CENTRALIZERS	
CONDUCTOR	PDC drillable guide shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing.
SURFACE	PDC drillable guide shoe, 1 joint casing, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	PDC drillable 10M,P-110 float shoe, 1 joint, PDC drillable 10M, P-110 float collar. Thread lock all float equipment. Maker joint at 7,600'.
LINER	Float shoe, 1 joint, float collar, 1 joint, landing collar. Thread lock all FE. Maker joints every 1000'.

PROJECT ENGINEER(S): Brad MacAfee 713-997-6383

MANAGER: Bob Dodd

RECEIVED: August 10, 2014

EP ENERGY E&P COMPANY, L.P.
FARNSWORTH 3-1C5
SECTION 1, T3S, R5W, U.S.B.&M.

PROCEED NORTH ON PAVED STATE HIGHWAY 87 FROM THE INTERSECTION OF HIGHWAY 87 WITH U.S. HIGHWAY 40 IN DUCHESNE, UTAH APPROXIMATELY 5.96 MILES TO AN INTERSECTION;

TURN LEFT AND TRAVEL NORTHWESTERLY 0.80 MILES ON STATE ROAD 35 TO AN INTERSECTION;

TURN LEFT AND TRAVEL WESTERLY 0.01 MILES ON A COUNTY ROAD TO THE BEGINNING OF THE PROPOSED ACCESS ROAD;

TURN LEFT AND TRAVEL SOUTHERY THEM WESTERLY ALONG EXISTING TWO-TRACK ROAD 0.27 MILES;

TURN LEFT AND FOLLOW FLAGS SOUTH 0.11 MILES TO THE PROPOSED LOCATION;

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 7.15 MILES.

RECEIVED: August 10, 2014

EP ENERGY E&P COMPANY, L.P.

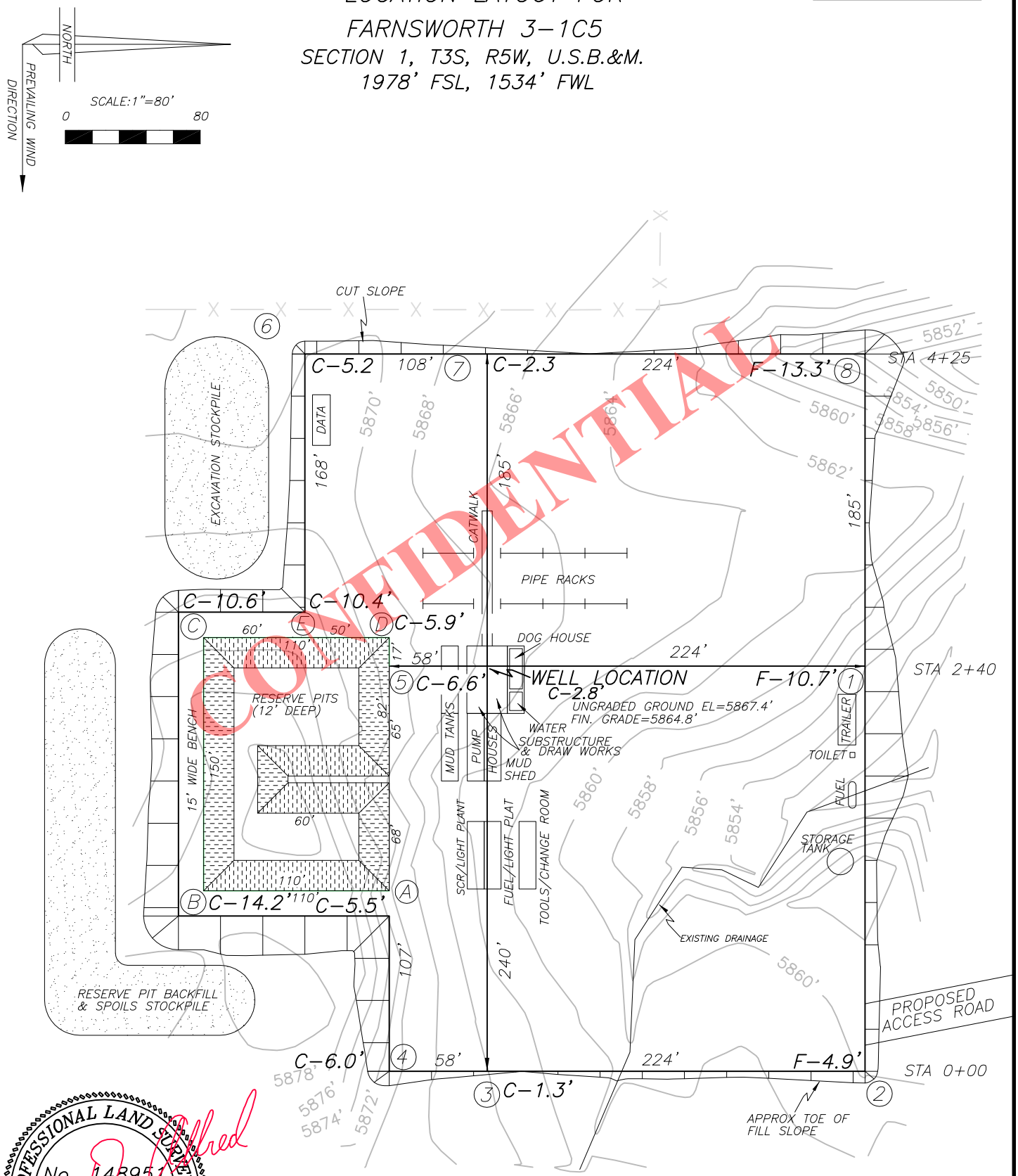
FIGURE #1

LOCATION LAYOUT FOR

FARNSWORTH 3-1C5

SECTION 1, T3S, R5W, U.S.B.&M.

1978' FSL, 1534' FWL



PROFESSIONAL LAND SURVEYOR
No. 148951
JERRY D. ALLRED
9 APR '14
STATE OF UTAH

Jerry D. Allred

9 APR 2014 01-128-374

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS
1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

RECEIVED: August 10, 2014

EP ENERGY E&P COMPANY, L.P.

FIGURE #2

LOCATION LAYOUT FOR

FARNSWORTH 3-1C5

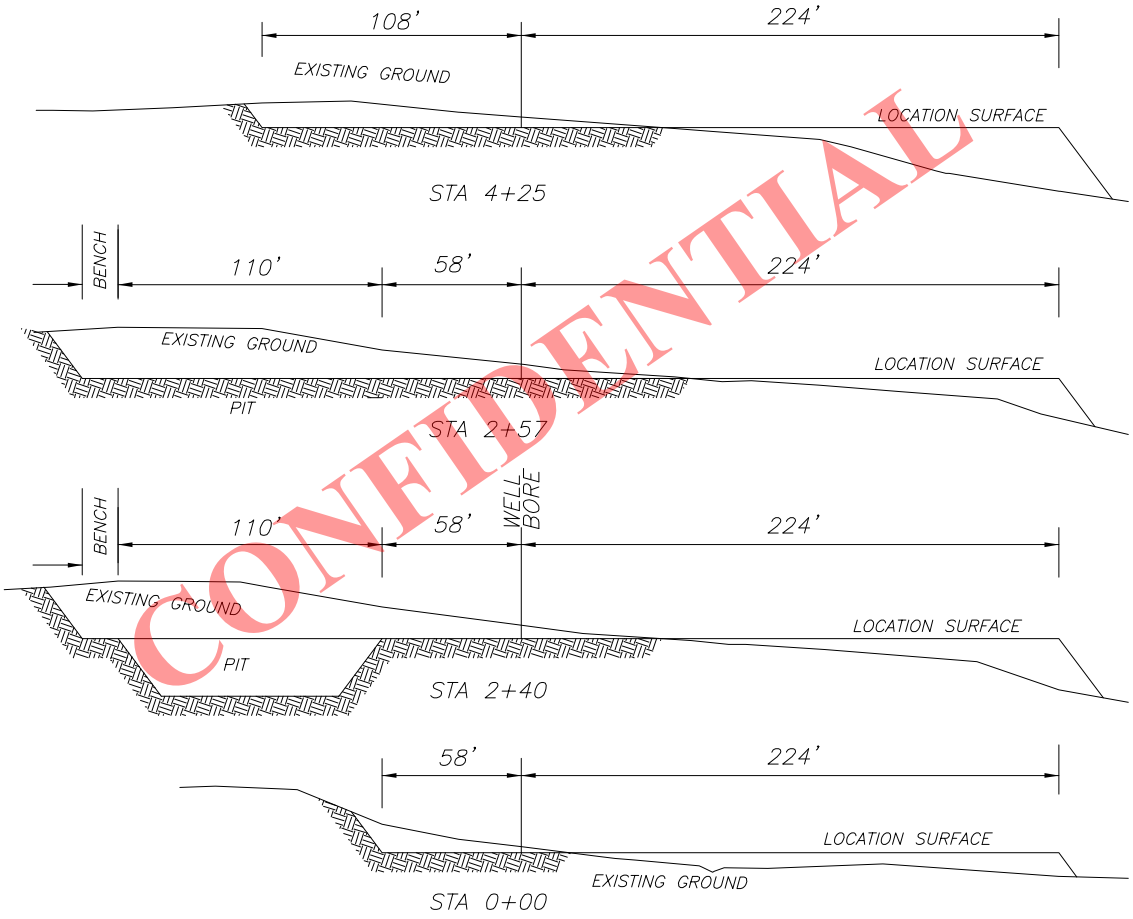
SECTION 1, T3S, R5W, U.S.B.&M.

1978' FSL, 1534' FWL

1"=40' X-SECTION SCALE

1"=80'

NOTE: ALL CUT/FILL SLOPES ARE 1½:1 UNLESS OTHERWISE NOTED



APPROXIMATE YARDAGES

TOTAL CUT (INCLUDING PIT) = 24063 CU. YDS.

PIT CUT	=	4955 CU. YDS.
TOPSOIL STRIPPING: (6")	=	3120 CU. YDS.
REMAINING LOCATION CUT	=	15988 CU. YDS

TOTAL FILL = 15988 CU. YDS.

LOCATION SURFACE GRAVEL=1495 CU. YDS. (4" DEEP)

ACCESS ROAD GRAVEL=175 CU. YDS.

PROFESSIONAL LAND SURVEYOR
No. 148951
JERRY D. ALLRED
9 APR '14
STATE OF UTAH

Jerry D. Allred

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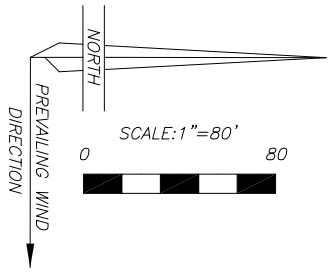
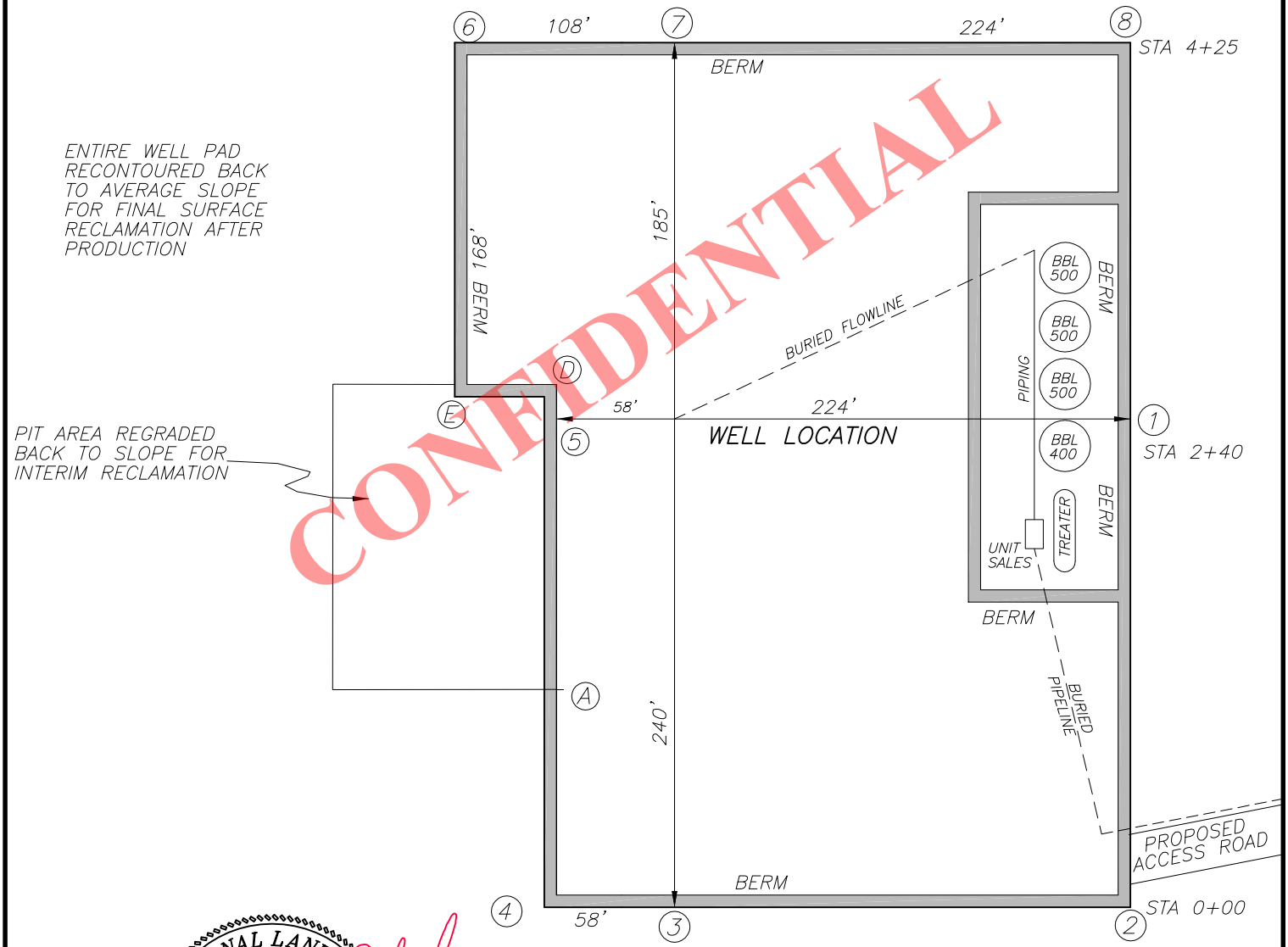
RECEIVED: August 10, 2014

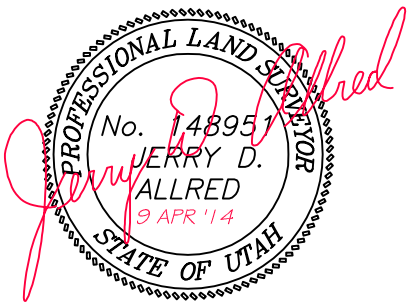
EP ENERGY E&P COMPANY, L.P.

FIGURE #3

LOCATION LAYOUT FOR
FARNSWORTH 3-1C5
SECTION 1, T3S, R5W, U.S.B.&M.
1978' FSL, 1534' FWL







JERRY D. ALLRED & ASSOCIATES
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1235 NORTH 700 EAST--P.O. BOX 975
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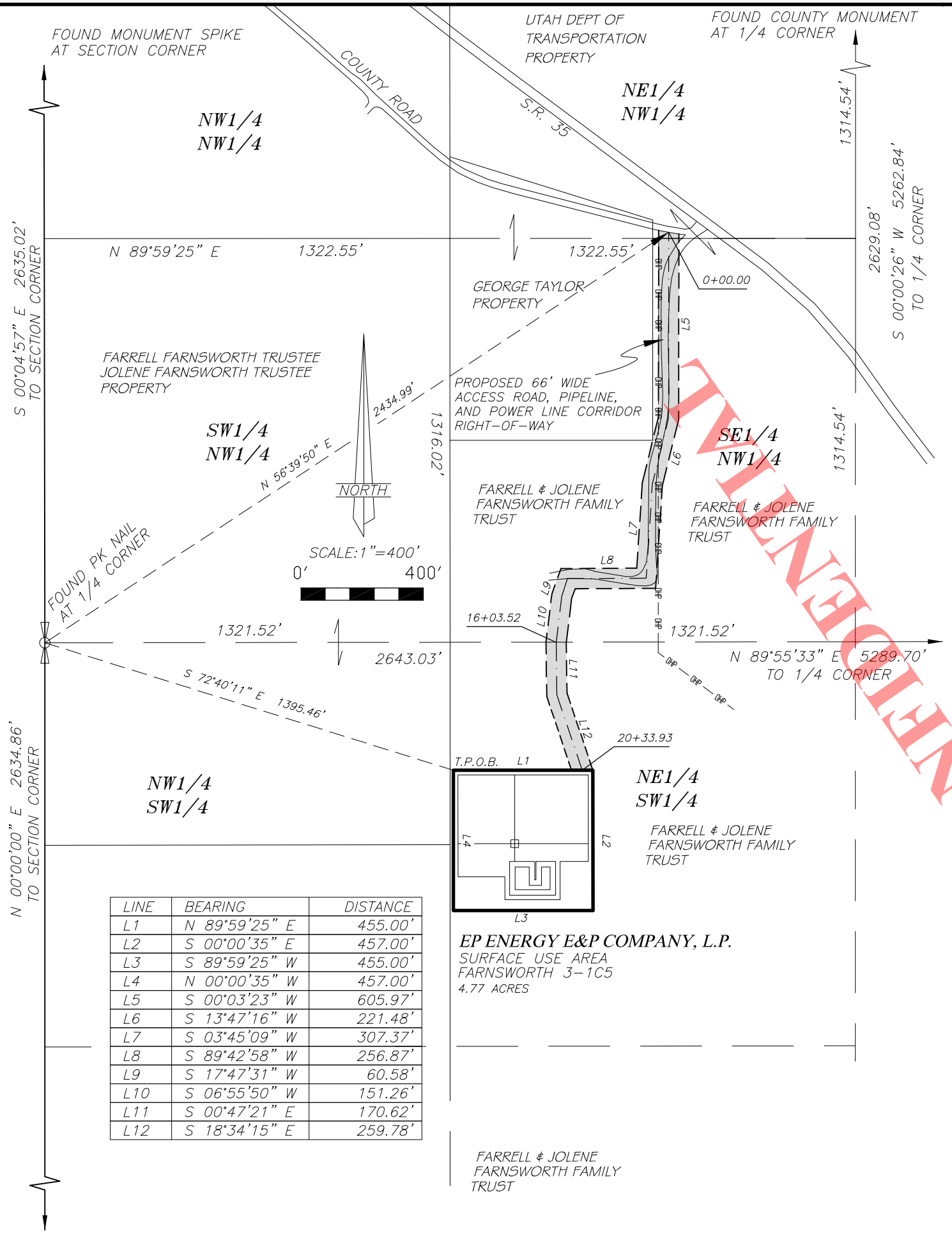


LINE	BEARING	DISTANCE
L1	N 89°59'25" E	455.00'
L2	S 00°00'35" E	457.00'
L3	S 89°59'25" W	455.00'
L4	N 00°00'35" W	457.00'
L5	S 00°03'23" W	605.97'
L6	S 13°47'16" W	221.48'
L7	S 03°45'09" W	307.37'
L8	S 89°42'58" W	256.87'
L9	S 17°47'31" W	60.58'
L10	S 06°55'50" W	151.26'
L11	S 00°47'21" E	170.62'
L12	S 18°34'15" E	259.78'

LOCATION USE AREA, ACCESS ROAD, PIPELINE, AND POWER LINE CORRIDOR RIGHT-OF-WAY SURVEY FOR

EP ENERGY E&P COMPANY, L.P.

FARNSWORTH 3-1C5

SECTION 1, TOWNSHIP 3 SOUTH, RANGE 5 WEST, U.S.B.&M.
DUCHESNE COUNTY, UTAH

USE AREA BOUNDARY DESCRIPTION

Commencing at the West 1/4 Corner of Section 1, Township 3 South, Range 5 West of the Uintah Special Base and Meridian;
Thence South 72°40'11" East 1395.46 feet to the TRUE POINT OF BEGINNING;
Thence North 89°59'25" East 455.00 feet;
Thence South 00°00'35" East 457.00 feet;
Thence South 89°59'25" West 455.00 feet;
Thence North 00°00'35" West 457.00 feet to the TRUE POINT OF BEGINNING, containing 4.77 acres.

ACCESS ROAD, PIPELINE, AND POWER LINE CORRIDOR RIGHT-OF-WAY DESCRIPTION

A 66 feet wide access road, pipeline, and power line right-of-way over portions of Section 1, Township 3 South, Range 5 West of the Uintah Special Base and Meridian, the centerline of which being described as follows;
Commencing at the West 1/4 Corner of the said Section 1;
Thence North 56°39'50" East 2434.99 feet to the TRUE POINT OF BEGINNING, said point being on the south line of a county road;
Thence South 00°03'23" West 605.97 feet;
Thence South 13°47'16" West 221.48 feet;
Thence South 03°45'09" West 307.37 feet;
Thence South 89°42'58" West 256.87 feet;
Thence South 17°47'31" West 60.58 feet;
Thence South 06°55'50" West 151.26 feet;
Thence South 00°47'21" East 170.62 feet;
Thence South 18°34'15" East 259.78 feet to the North line of the EP Energy E&P Company Farnsworth 3-1C5 well location use area boundary. Said right-of-way being 2033.93 feet in length, with the sidelines being shortened or elongated to intersect said use area boundary and existing road lines.

SURVEYOR'S CERTIFICATE

This is to certify that this plat was prepared from the field notes and electronic data collector files of an actual survey made by me, or under my personal supervision, of the use area, access road, pipeline, and power line rights-of-way shown hereon, and that the monuments indicated were found or set during said survey, and that this plat accurately represents said survey to the best of my knowledge.

PROFESSIONAL LAND SURVEYOR
No. 148951
JERRY D. ALLRED
10 APR '14
STATE OF UTAH

Jerry D. Allred, Professional Land Surveyor, Certificate 148951 (Utah)

THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT

THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT A CONTROL POINT (SECTION CORNER) LOCATED AT LAT. 40°15'22.90258"N AND LONG. 110°23'21.19760"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

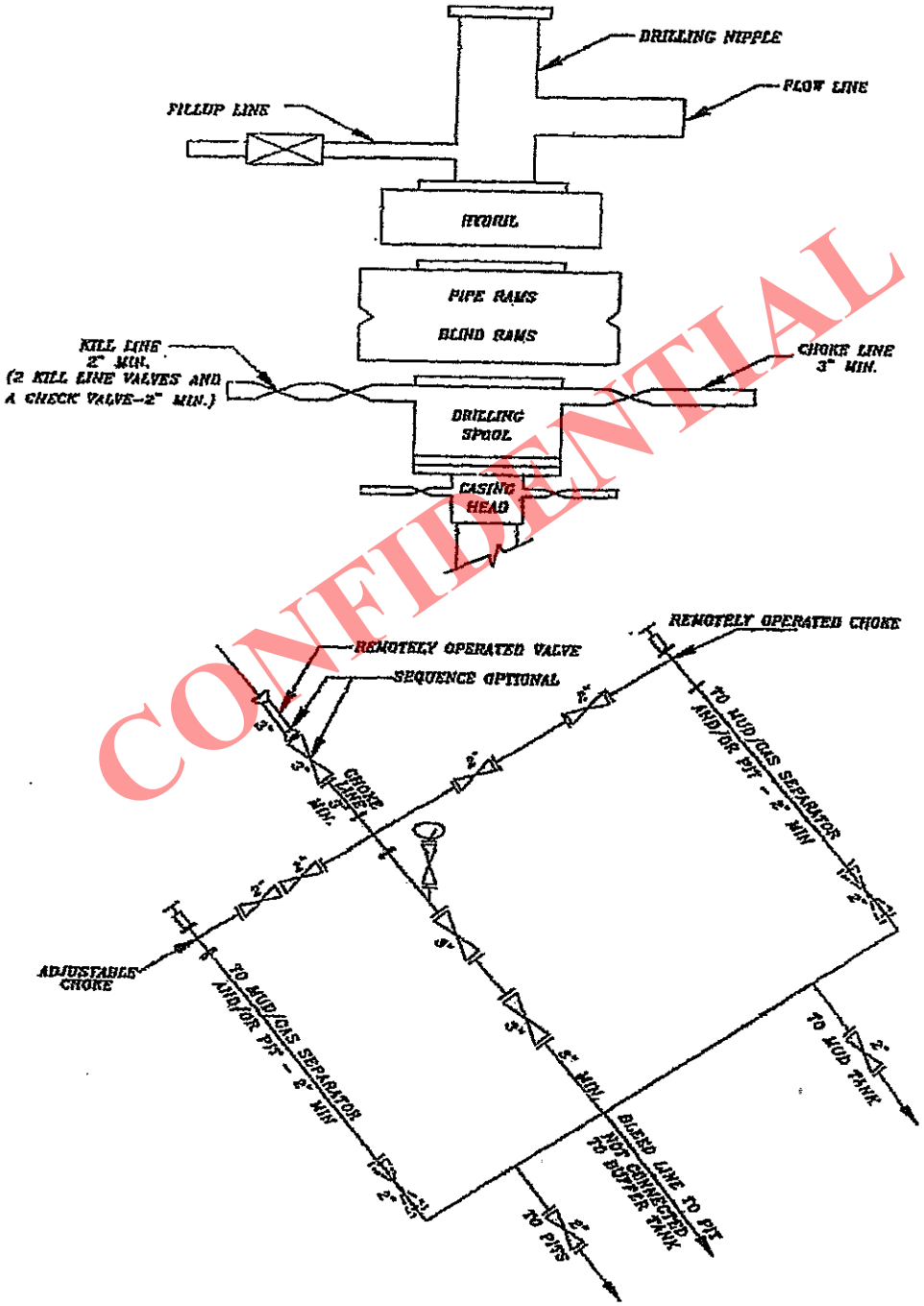
REV 10 APR 2014
26 FEB 2013 01-128-374

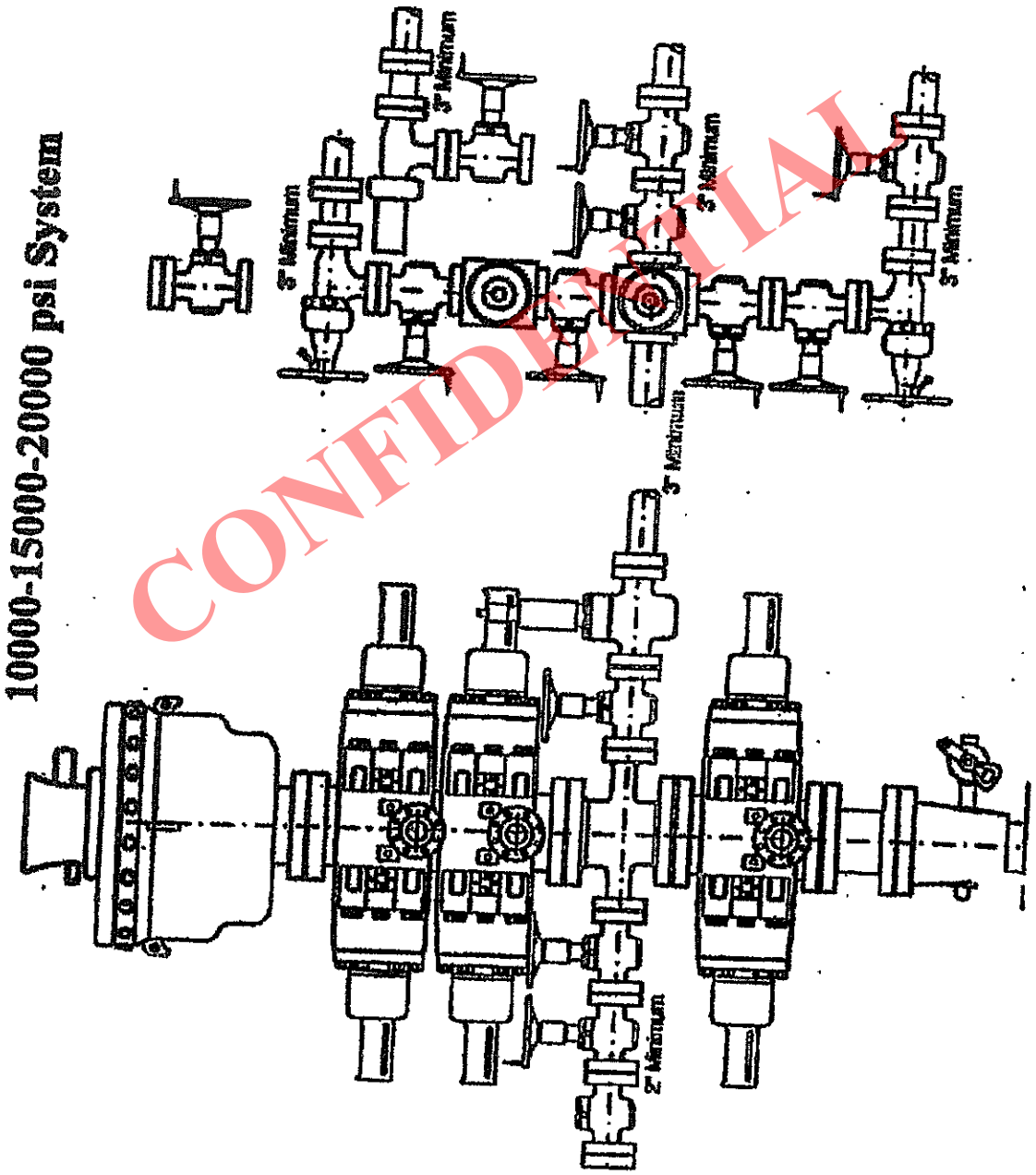
JERRY D. ALLRED AND ASSOCIATES
SURVEYING CONSULTANTS
1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

RECEIVED: August 10, 2014

API Well Number: 43013530970000

5M BOP STACK and CHOKE MANIFOLD SYSTEM



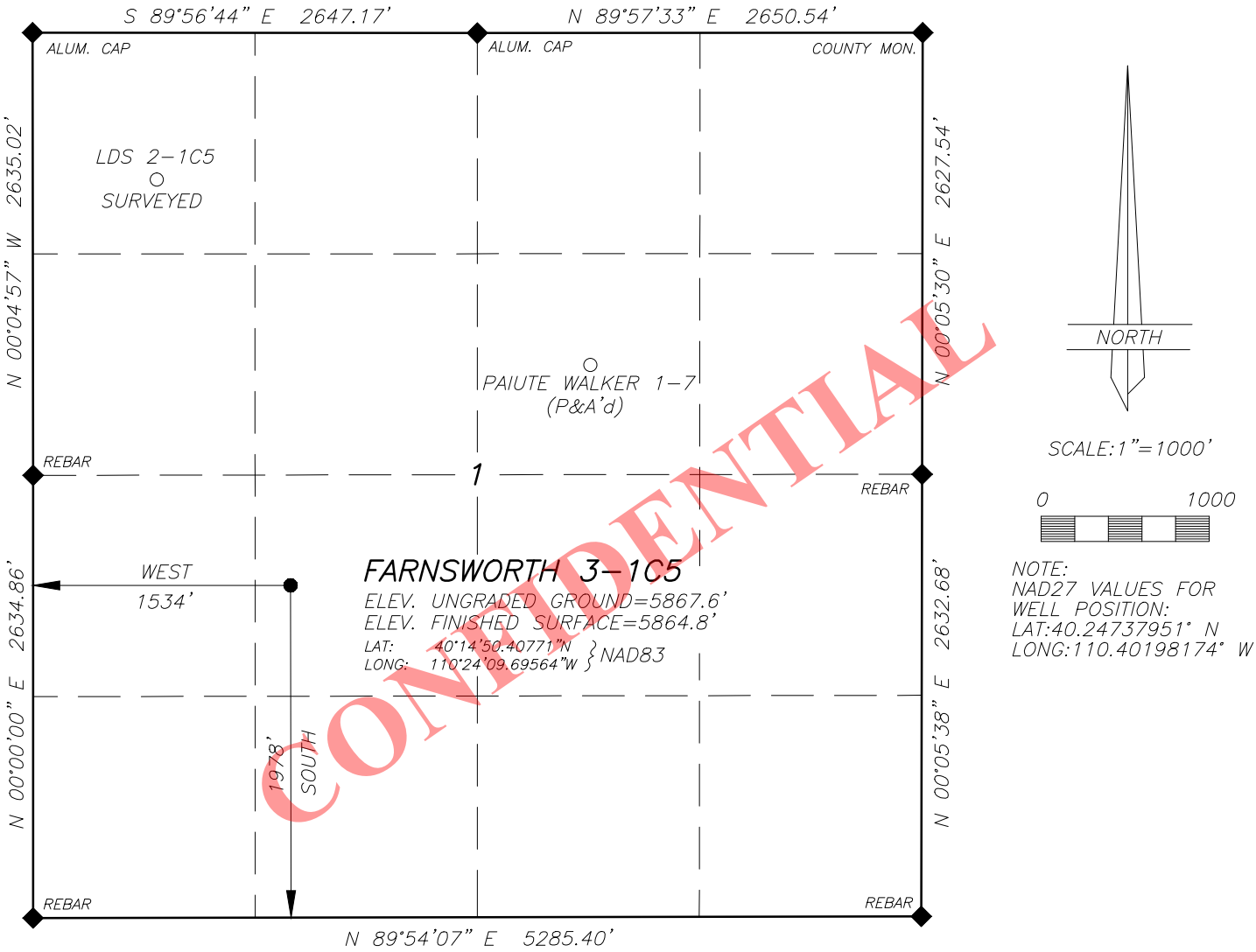


EP ENERGY E&P COMPANY, L.P.

WELL LOCATION

FARNSWORTH 3–1C5

LOCATED IN THE NE¼ OF THE SW¼ OF SECTION 1, T3S, R5W, U.S.B.&M. DUCHESNE COUNTY, UTAH



NOTE:
NAD27 VALUES FOR WELL POSITION:
LAT:40.24737951° N
LONG:110.40198174° W

LEGEND AND NOTES

◆ CORNER MONUMENTS FOUND AND USED BY THIS SURVEY

THE GENERAL LAND OFFICE (G.L.O.) PLAT WAS USED FOR REFERENCE AND CALCULATIONS AS WAS THE U.S.G.S. MAP

THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT

THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT THE SECTION CORNER LOCATED AT LAT. 40°15'22.90258"N AND LONG. 110°23'21.19760"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

BASIS OF ELEVATIONS: NAVD 88 DATUM USING THE UTAH REFERENCE NETWORK CONTROL SYSTEM

REV 16 APR 2014
REV 9 APR 2014
20 FEB 2013 01–128–374

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM THE FIELD NOTES AND ELECTRONIC DATA COLLECTOR FILES OF AN ACTUAL SURVEY PERFORMED BY ME, OR UNDER MY PERSONAL SUPERVISION, DURING WHICH THE SHOWN MONUMENTS WERE FOUND OR REESTABLISHED.

PROFESSIONAL LAND SURVEYOR
No. 148951
JERRY D. ALLRED
16 APR '14
STATE OF UTAH

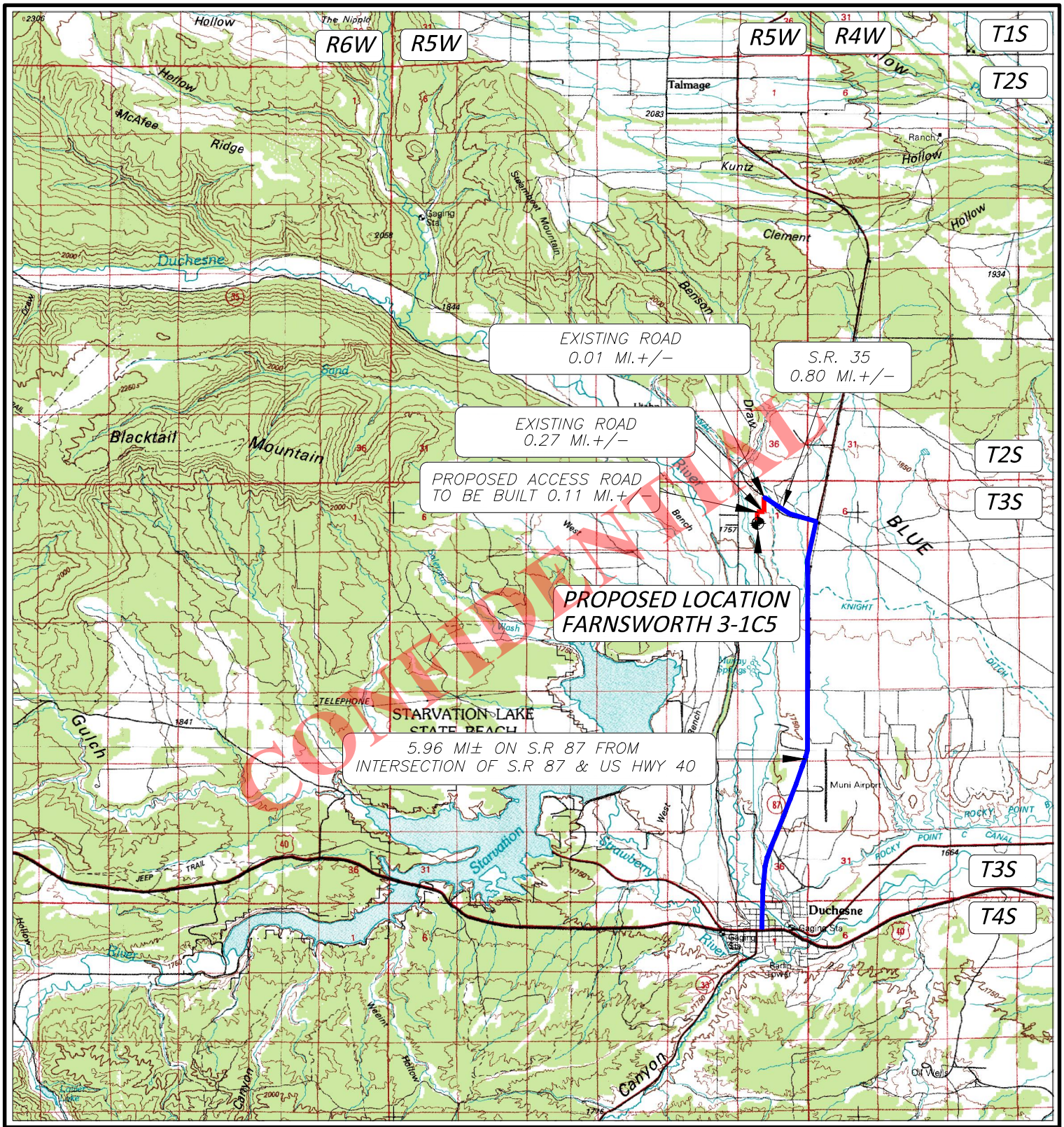
Jerry D. Allred

JERRY D. ALLRED, PROFESSIONAL LAND SURVEYOR, CERTIFICATE NO. 148951 (UTAH)

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS
1235 NORTH 700 EAST––P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738–5352

RECEIVED: August 10, 2014

API Well Number: 43013530970000



LEGEND:

● PROPOSED WELL LOCATION

01-128-374

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS
1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

NORTH

EP ENERGY E&P COMPANY, L.P.

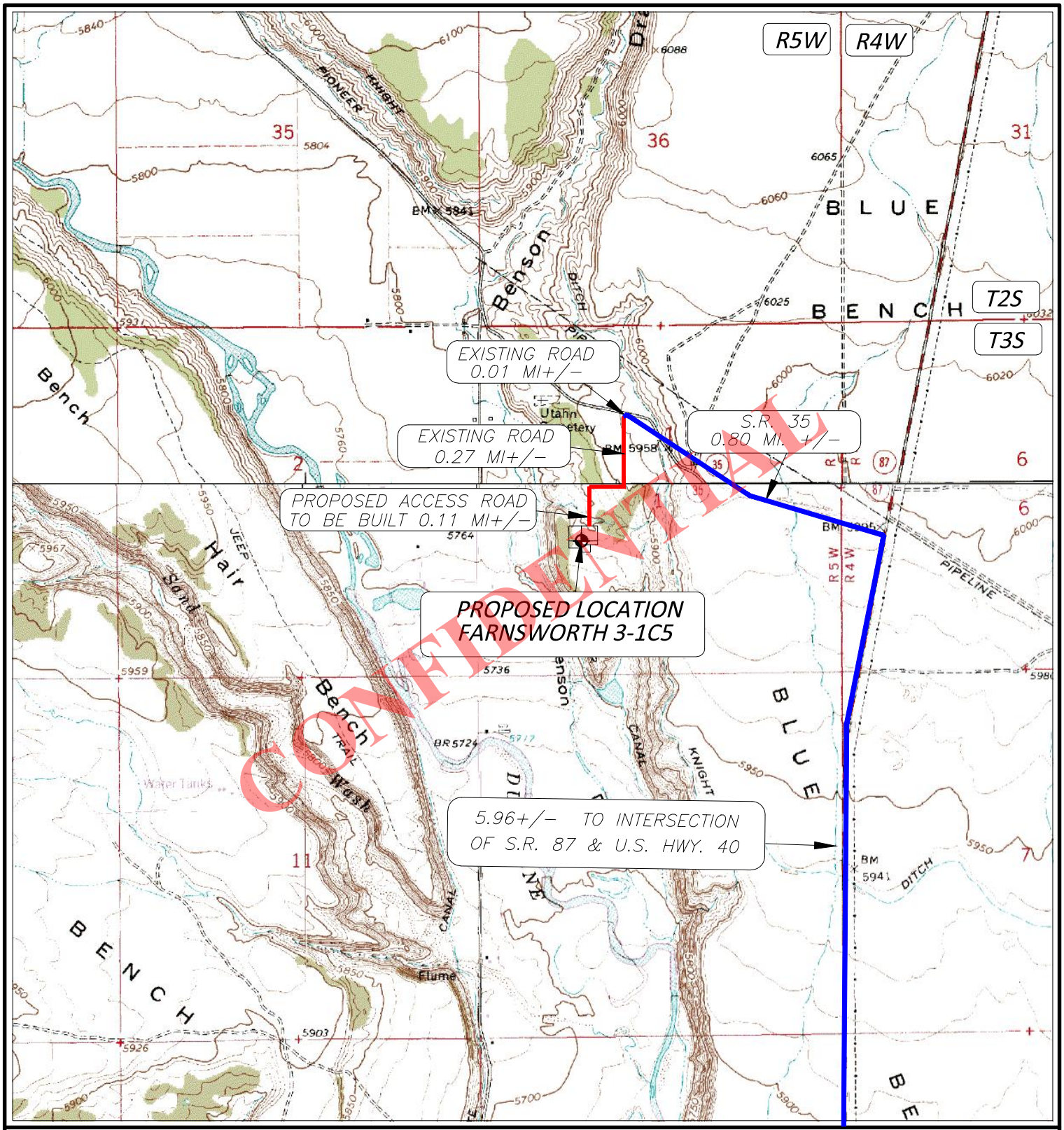
FARNSWORTH 3-1C5
SECTION 1, T3S, R5W, U.S.B.&M.
1978' FSL 1534' FWL

TOPOGRAPHIC MAP "A"

SCALE; 1"=10,000'
11 APR 2014

RECEIVED: August 10, 2014

API Well Number: 43013530970000



LEGEND:

- PROPOSED WELL LOCATION
- PROPOSED ACCESS ROAD
- EXISTING GRAVEL ROAD
- EXISTING PAVED ROAD

01-128-374

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS
1235 NORTH 700 EAS--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

NORTH

EP ENERGY E&P COMPANY, L.P.

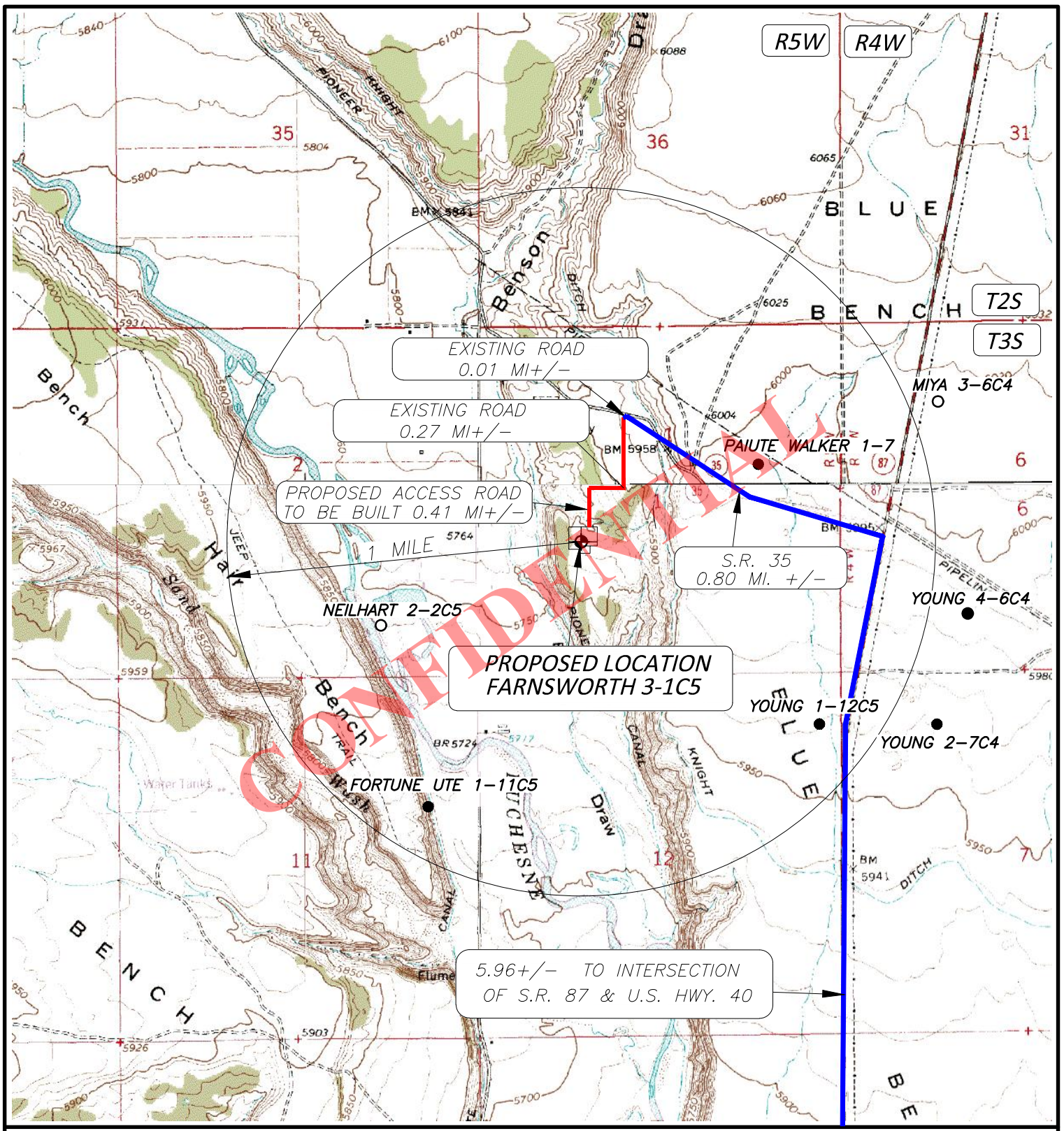
FARNSWORTH 3-1C5
SECTION 1, T3S, R5W, U.S.B.&M.
1978' FSL 1534' FWL

TOPOGRAPHIC MAP "B"

SCALE; 1"=2000'
11 APR 2014

RECEIVED: August 10, 2014

API Well Number: 43013530970000



LEGEND:

PROPOSED WELL LOCATION

2-25C6

01-128-374

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS
1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

NORTH

EP ENERGY E&P COMPANY, L.P.

FARNSWORTH 3-1C5
SECTION 1, T3S, R5W, U.S.B.&M.
1978' FSL 1534' FWL

TOPOGRAPHIC MAP "C"

SCALE; 1"=2000'
11 APR 2014

RECEIVED: August 10, 2014

AFFIDAVIT OF SURFACE USE AGREEMENT

This **Affidavit of Surface Use Agreement** ("Affidavit"), dated effective this 26th day of June, 2014, is being made by **EP Energy E&P Company, L.P.** ("EP Energy"), a Delaware limited partnership, whose address is 1001 Louisiana Street, Suite 2400, Houston, Texas 77002, and herein represented by **John DeWitt, Jr.** ("Affiant"), being first duly sworn upon oath, who hereby deposes and states as follows:

1. Affiant is over eighteen (18) years of age and is currently employed by EP Energy as a Senior Landman.

2. EP Energy is the operator of the proposed Farnsworth 3-1C5 (the "Well") which is to be located in the Northeast Quarter of the Southwest Quarter (NE/4 of SW/4) of Section 1, Township 3 South, Range 5 West, U.S.M., Duchesne County, Utah (the "Drillsite Location"). The surface of the Drillsite Location is owned by **FARRELL FARNSWORTH** and **JOLENE C. FARNSWORTH, Trustees** of the **FARRELL AND JOLENE C. FARNSWORTH FAMILY TRUST U/A/D December 14, 1995** (collectively, the "Surface Owner").

3. EP Energy and the Surface Owner have entered into and executed that certain (1) *Surface Use Agreement*, dated effective June 23, 2014, by and between EP Energy and the Surface Owner, to cover any and all injuries or damages of every character and description sustained by the Surface Owner or Surface Owner's property as a result of EP Energy's operations including, but not limited to, construction of the Drillsite Location and drilling the Well.

FURTHER AFFIANT SAYETH NOT.

AFFIANT:

By: _____
Name: John DeWitt, Jr.
Title: Sr. Landman

STATE OF TEXAS §
§
COUNTY OF HARRIS §

Sworn to and subscribed before me on this 26th day of June, 2014, by **John DeWitt, Jr.** as Sr. Landman for **EP Energy E&P Company, L.P.**, a Delaware limited partnership, on behalf of said limited partnership.

_____
Notary Public in and for the State of Texas

[SEAL]

Application for Permit to Drill – State DOGM
Farnsworth 3-1C5
Duchesne County, Utah

EP Energy E&P Company, L.P.

Related Surface Information

1. **Current Surface Use:**
   - Livestock Grazing and Oil and Gas Production.

2. **Proposed Surface Disturbance:**
   - The road will be crown and ditch. Water wings will be constructed on the access road as needed.
   - The topsoil will be windrowed and re-spread in the borrow area.
   - New road to be constructed will be approximately .11 miles in length and 66 feet wide.
   - All equipment and vehicles will be confined to the access road, pad and area specified in the APD.

3. **Location Of Existing Wells:**
   - Existing oil, gas wells within one (1) mile radius of proposed well are provided in EXHIBIT C.

4. **Location And Type Of Drilling Water Supply:**
   - Drilling water: Duchesne City Water

5. **Existing/Proposed Facilities For Productive Well:**
   - There are no existing facilities that will be utilized for this well.
   - A pipeline corridor .11 miles will parallel the proposed access road. The corridor will contain one 4 inch gas line and one 2 inch gas line and one 2 inch Salt Water disposal line. Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area; backsloping and contouring all cut and fill slopes. These areas will be reseeded. Refer to plans for reclamation of surface for details.
   - Upgrade and maintain access roads and drainage control structures (e.g., culverts, drainage dips, ditching, etc.) as necessary to prevent soil erosion and accommodate safe, year-round traffic.

6. **Construction Materials:**
   - Native soil from road and location will be used for construction materials along with gravel and/or scoria road base material. In the event that conditions should necessitate graveling of all or part of the access road and location, surfacing materials will be purchased from commercial suppliers in the marketing area.

7. **Methods For Handling Waste Disposal:**
   - The reserve pit will be designed to prevent the collection of surface runoff and will be constructed with a minimum of ½ the total depth below the original ground surface on the lowest point with the pit. The pit will be lined with a 20-mil polyethylene to prevent leakage of fluids. The liner will be rolled into place and secured at the ends, i.e. buried on top of the pit berms. Prior to use, the reserve pit will be fenced on three sides; the fourth side will be fenced at the time the rig is removed. Drilling fluids, cuttings and produced water will be contained in the reserve pit (trash will be place in the trash cage). Fluids in the reserve pit will be allowed to evaporate prior to pit burial.
   - Garbage and other trash will be contained in the portable trash cage and hauled off the location to an authorized disposal site. Any trash on the pad will be cleaned up prior to the rig moving off location and hauled to an authorized disposal site.
   - Sewage will be handled in Portable Toilets.
   - Produced water will be placed in the reserve pit for a period not to exceed ninety days after initial production. Any hydrocarbons produced during completion work will be contained in test tanks and removed from the location at a later date.
   - Water from the reserve pit may be used for drilling of additional wells. The water will be trucked along access roads as approved in pertinent APD's

8. **Ancillary Facilities:**
   - There will be no ancillary facilities associated with this project.

RECEIVED: August 10, 2014

9. **Surface Reclamation Plans:**

Backfilling of the pits will be done when dry. In the event of a dry hole, the location will be re-contoured, the topsoil will be distributed evenly over the entire location, and the seedbed prepared.

- Seed will be planted after September 15th, and prior to ground frost, or seed will be planted after the frost has left and before May 15th. Slopes to steep for machinery will be hand broadcast and raked with twice the specified amount of seed.

    1. The construction program and design are on the attached cut, fill and cross sectional diagrams.
    2. Prior to construction, all topsoil will be removed from the entire site and stockpiled. Topsoil for this site is the first 6 inches of soil materials.
    3. After the location has been reshaped and after redistributing the topsoil, the operator will rip and scarify the drilling platform and access road on the contour, to a depth of at least 12 inches.

- Rehabilitation will begin upon the completion of the drilling. Complete rehabilitation will depend on weather conditions and the amount of time required to dry the reserve pit.

    1. All rehabilitation work including seeding will be completed as soon as weather and the reserve pit conditions are appropriate.
    2. Landowner will be contacted for rehabilitation requirements.

10. **Surface Ownership:**

Farrell Farnsworth & Jolene C. Farnsworth
Trustees of the Farrell and Jolene C. Farnsworth Family Trust U/A/D December 14, 1995
P.O. Box 111
Duchesne, Utah 84021
435-733-0375

Other Information:

- The surface soil consists of clay, and silt.
- Flora – vegetation consists of the following: Sagebrush, Juniper and prairie grasses.
- Fauna – antelope, deer, coyotes, raptors, small mammals, and domestic grazing animals.
- Current surface uses – Livestock grazing and mineral exploration and production.

- **Operator and Contact Persons:**

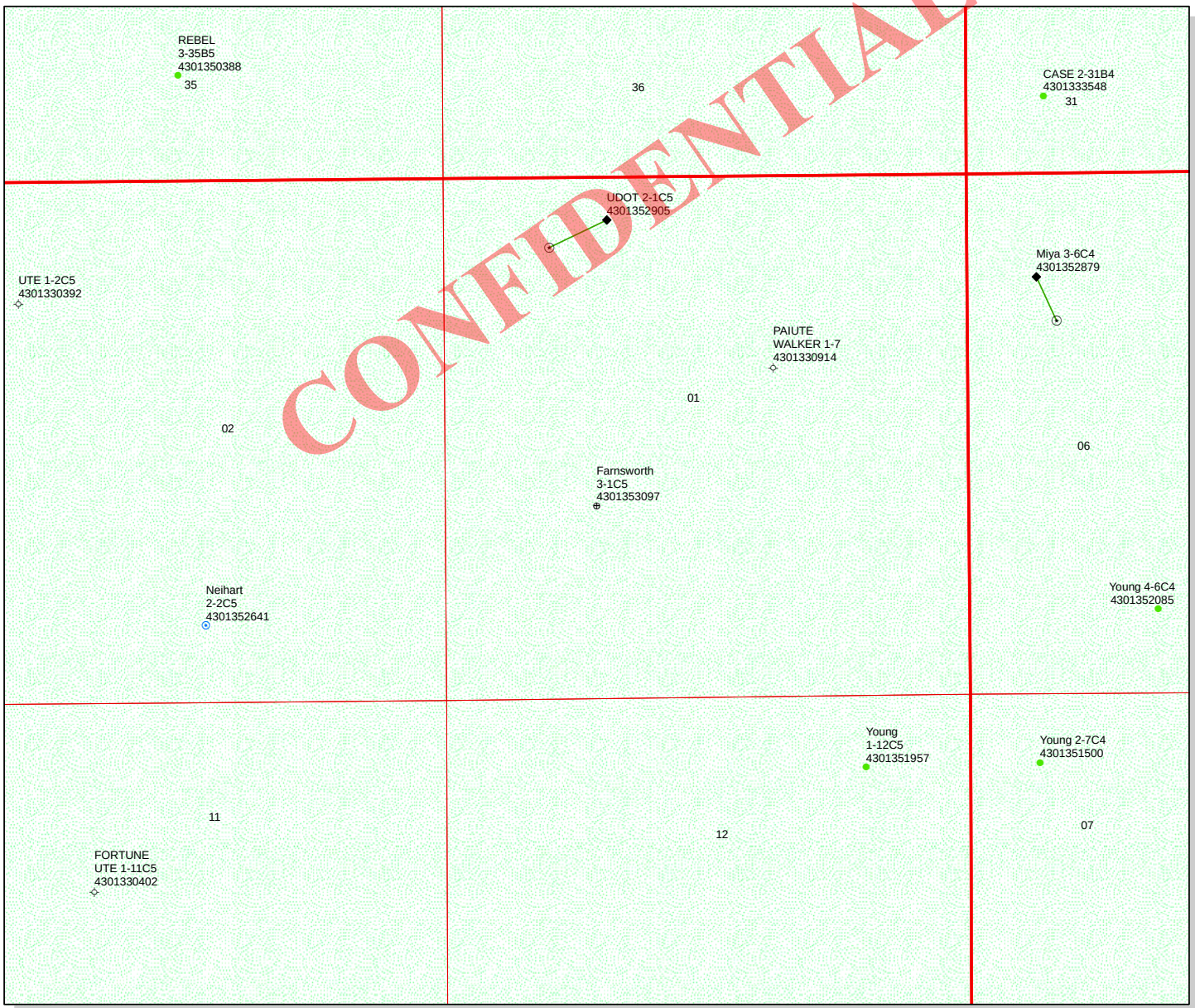
Construction and Reclamation:
EP Energy E&P Company, L.P.
Wayne Garner
PO Box 410
Altamont, Utah 84001
435-454-3394 – Office
435-823-1490 – Cell

Regarding This APD
EP Energy E&P Company, L.P.
Maria S. Gomez
1001 Louisiana, Rm 2730D
Houston, Texas 77002
713-997-5038 – Office

Drilling
EP Energy E&P Company, L.P.
Brad MacAfee – Drilling Engineer
1001 Louisiana, Rm 2660D
Houston, Texas 77002
713-997-6383 – office
281-813-0902 – Cell

RECEIVED: August 10, 2014

API Well Number: 43013530970000



API Number: 4301353097

Well Name: Farnsworth 3-1C5

Township: T03.0S Range: R05.0W Section: 01 Meridian: U

Operator: EP ENERGY E&P COMPANY, L.P.

Map Prepared: 8/13/2014
Map Produced by Diana Mason

Wells Query

Status

- APD - Aproved Permit
- DRL - Spuded (Drilling Commenced)
- GIW - Gas Injection
- GS - Gas Storage
- LOC - New Location
- OPS - Operation Suspended
- PA - Plugged Abandoned
- PGW - Producing Gas Well
- POW - Producing Oil Well
- SGW - Shut-in Gas Well
- SOW - Shut-in Oil Well
- TA - Temp. Abandoned
- TW - Test Well
- WDW - Water Disposal
- WIW - Water Injection Well
- WSW - Water Supply Well

Units

STATUS

- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields

STATUS

- Unknown
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- STORAGE
- TERMINATED

1,250 625 0 1,250 Feet

1:12,470

RECEIVED: August 13, 2014

API Well Number: 43013530970000

BOPE REVIEW EP ENERGY E&P COMPANY, L.P. Farnsworth 3-1C5 43013530970000

Well Name	EP ENERGY E&P COMPANY, L.P. Farnsworth 3-1C5 43013530970000			
String	Cond	Surf	I1	L1
Casing Size(")	13.375	9.625	7.000	5.000
Setting Depth (TVD)	700	2200	9350	12400
Previous Shoe Setting Depth (TVD)	0	700	2200	9350
Max Mud Weight (ppg)	8.3	8.3	10.5	13.2
BOPE Proposed (psi)	500	500	10000	10000
Casing Internal Yield (psi)	2730	5750	11220	13940
Operators Max Anticipated Pressure (psi)	8511			13.2

Calculations	Cond String	13.375	"	
Max BHP (psi)	.052*Setting Depth*MW=	302		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	218	YES	rotating head
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	148	YES	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	148	NO	
Required Casing/BOPE Test Pressure=		500	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi	*Assumes 1psi/ft frac gradient

Calculations	Surf String	9.625	"	
Max BHP (psi)	.052*Setting Depth*MW=	950		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	686	NO	diverter stack
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	466	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	620	YES	OK
Required Casing/BOPE Test Pressure=		2200	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		700	psi	*Assumes 1psi/ft frac gradient

Calculations	I1 String	7.000	"	
Max BHP (psi)	.052*Setting Depth*MW=	5105		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3983	YES	10M BOPE w/rotating head, 5M annular, spacer spool,
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3048	YES	dbl rams, single w/flex rams
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3532	NO	OK
Required Casing/BOPE Test Pressure=		7854	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		2200	psi	*Assumes 1psi/ft frac gradient

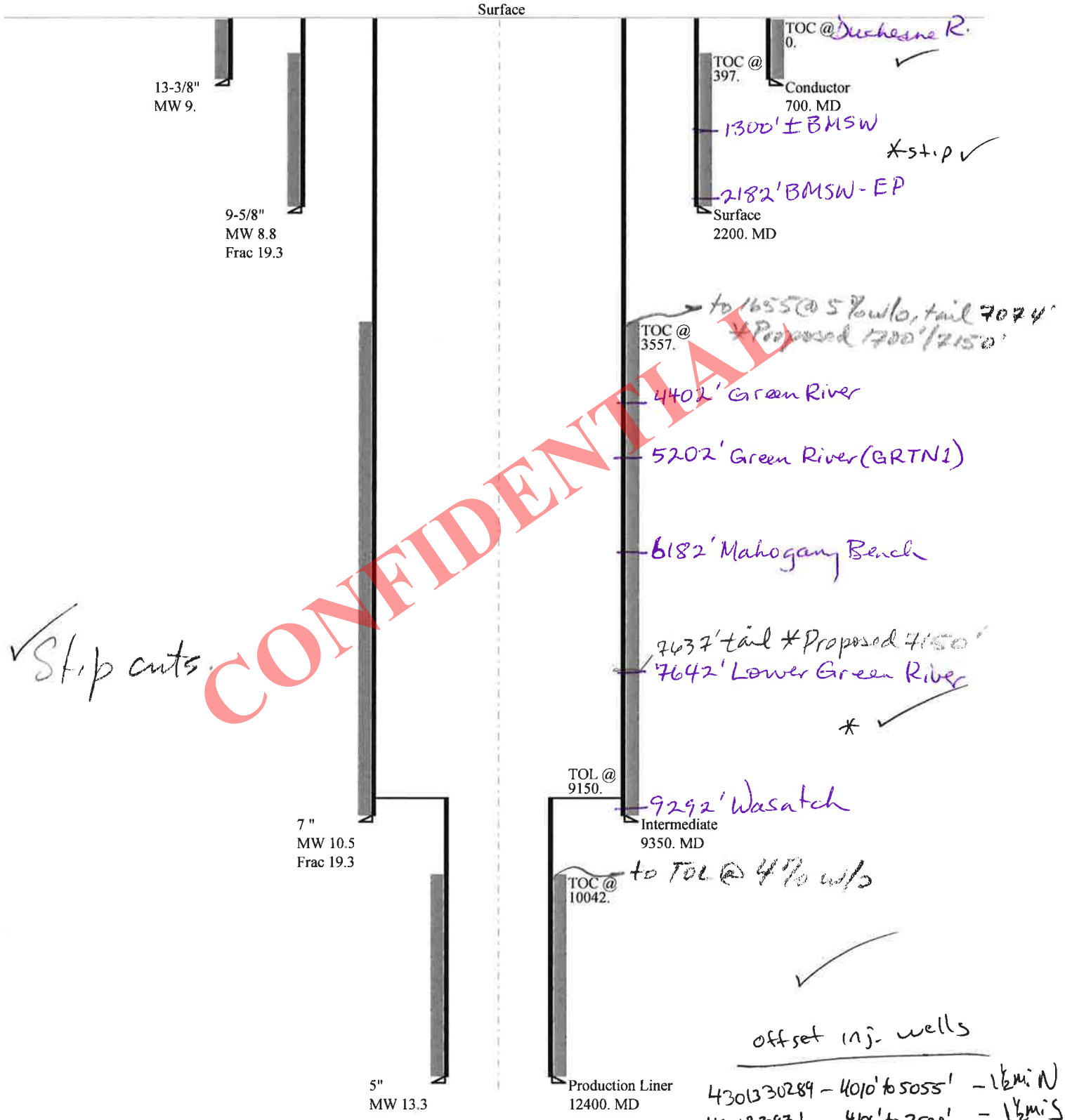
Calculations	L1 String	5.000	"	
Max BHP (psi)	.052*Setting Depth*MW=	8511		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	7023	YES	10M BOPE w/rotating head, 5M annular, spacer spool,
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	5783	YES	dbl rams, single w/flex rams
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	7840	YES	OK
Required Casing/BOPE Test Pressure=		9758	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		9350	psi	*Assumes 1psi/ft frac gradient

RECEIVED: October 09, 2014

API Well Number: 43013530970000

43013530970000 Farnsworth 3-1C5

Casing Schematic



API Well Number: 43013530970000

Well name:	**43013530970000 Farnsworth 3-1C5**
Operator:	**EP ENERGY E&P COMPANY, LP.**
String type:	Conductor
Project ID:	43-013-53097
Location:	DUCHESNE COUNTY

Design parameters:

Collapse
Mud weight: 9.000 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 243 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 327 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 607 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 84 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: Surface

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	700	13.375	54.50	J-55	ST&C	700	700	12.49	8686

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	327	1130	3.453	327	2730	8.34	33.1	514	15.54 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: October 3,2014
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 700 ft, a mud weight of 9 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

API Well Number: 43013530970000

Well name:	**43013530970000 Farnsworth 3-1C5**
Operator:	**EP ENERGY E&P COMPANY, LP.**
String type:	Surface
Project ID:	43-013-53097
Location:	DUCHESNE COUNTY

Design parameters:

Collapse
Mud weight: 8.800 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 1,716 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 2,200 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 1,912 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 105 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 397 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 9,350 ft
Next mud weight: 10.500 ppg
Next setting BHP: 5,100 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,200 ft
Injection pressure: 2,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	2200	9.625	40.00	N-80	LT&C	2200	2200	8.75	27995

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1006	3090	3.072	2200	5750	2.61	76.5	737	9.64 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: October 3,2014
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 2200 ft, a mud weight of 8.8 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

API Well Number: 43013530970000

Well name:	**43013530970000 Farnsworth 3-1C5**
Operator:	**EP ENERGY E&P COMPANY, LP.**
String type:	Intermediate
Project ID:	43-013-53097
Location:	DUCHESNE COUNTY

Design parameters:

Collapse
Mud weight: 10.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 5,839 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 7,896 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on buoyed weight.
Neutral point: 7,864 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 205 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: 3,557 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 12,400 ft
Next mud weight: 13.300 ppg
Next setting BHP: 8,567 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 9,350 ft
Injection pressure: 9,350 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	9350	7	29.00	HCP-110	LT&C	9350	9350	6.059	105586

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	5100	9200	1.804	7896	11220	1.42	228.1	797	3.49 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: October 3,2014
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 9350 ft, a mud weight of 10.5 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

API Well Number: 43013530970000

Well name:	**43013530970000 Farnsworth 3-1C5**
Operator:	**EP ENERGY E&P COMPANY, LP.**
String type:	Production Liner
Project ID:	43-013-53097
Location:	DUCHESNE COUNTY

Design parameters:

Collapse
Mud weight: 13.300 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 5,839 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 8,567 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on buoyed weight.
Neutral point: 11,752 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 248 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: 10,042 ft

Liner top: 9,150 ft
Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	3200	5	18.00	HCP-110	ST-L	12400	12400	4.151	253440

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	8567	15360	1.793	8567	13940	1.63	45.9	341	7.42 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: October 3,2014
Salt Lake City, Utah

Remarks:
For this liner string, the top is rounded to the nearest 100 ft.Collapse is based on a vertical depth of 12400 ft, a mud weight of 13.3 ppg The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

ON-SITE PREDRILL EVALUATION
Utah Division of Oil, Gas and Mining

Operator	EP ENERGY E&P COMPANY, L.P.				
Well Name	Farnsworth 3-1C5				
API Number	43013530970000	**APD No**	10152	**Field/Unit**	ALTAMONT
Location: 1/4,1/4	NESW **Sec** 1 **Tw** 3.0S **Rng** 5.0W 1978 FSL 1534 FWL				
GPS Coord (UTM)	550801 4455385	**Surface Owner**	Farrell and Jolene C. Farnsworth Family Trust		

Participants

Farrell Farnsworth (surface owner); Randy Fredrick (EP Energy Construction); Heather Ivie (EP Lands); Dennis Ingram (DOGM)

Regional/Local Setting & Topography

The Farnsworth 3-1C5 well is proposed in northeastern Utah or the Uintah Basin, and can be accessed by driving from the junction of US Highway 40 and Highway 87 in Duchesne north for 5.96 miles, then turn west/northwest on Highway 35 for another 0.80 miles then turn south along proposed access road for another 0.53 miles into well site. This well is proposed along the eastern slopes of the Duchesne River bottom country in cedar/sagebrush habitat. The mouth of Benson Draw is found approximately 0.60 miles north of this proposed well; The Duchesne River runs along the western side of the river bottom lands at this point and located just over half a mile away; to the south, the surface topography drops off into the river bottom and has fresh water ponds, the river and hay fields less than a mile away. The topography to the east rises up onto Blue Bench which is flat, arid rangelands. The immediate topography at the proposed well site slopes to the north, showing upwards of a 10.0 cut along the south and 13.3 feet of fill on the northwest corner where a drainage flows toward a fresh water pond some two hundred feet to the north.

Surface Use Plan

Current Surface Use
Residential

New Road Miles	Well Pad	Src Const Material	Surface Formation
0.51	**Width** 357 **Length** 425	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands Y

Pond below corner number 8.

Flora / Fauna

Cedar trees, sagebrush, bunch grass, prickly pear cactus;

Mule deer, mountain lion, black bear, coyote, fox, raccoon, rabbit, smaller mammals and bird life native to region.

RECEIVED: October 09, 2014

Soil Type and Characteristics

Reddish-brown in color, fine grained sandy loam with some clays and cobble rocks present

Erosion Issues Y

Sedimentation Issues Y

Site Stability Issues N

Drainage Diverson Required? Y

Landowner wants water drainage routed away from his pond into a shallow sediment pond.

Berm Required? Y

Double berming for location and tanks high enough to prevent contamination of pond to the north

Erosion Sedimentation Control Required? Y

Silt fencing around corner number 8 west toward corner number 2 where the slope or fill might out wash toward pond below

Paleo Survey Run? N **Paleo Potental Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N

Reserve Pit

Site-Specific Factors		Site Ranking	
Distance to Groundwater (feet)	75 to 100	10	
Distance to Surface Water (feet)	200 to 300	10	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)	>1320	0	
Native Soil Type	High permeability	20	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Unknown	10	
	Final Score	55	1 Sensitivity Level

Characteristics / Requirements

Proposed reserve pit off the south side of location in cut, measuring 110' wide by 150' long by 12' deep.

Closed Loop Mud Required? **Liner Required?** Y **Liner Thickness** 20 **Pit Underlayment Required?** Y

Other Observations / Comments

RECEIVED: October 09, 2014

Landowner concerns: follow proposed staking into well pad, divert storm water that enters the location along the east back into sediment pond rather than into his fresh water pond (in the landowner agreement).

Dennis Ingram	9/9/2014
Evaluator	**Date / Time**

RECEIVED: October 09, 2014

Application for Permit to Drill
Statement of Basis
Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
10152	43013530970000	LOCKED	OW	P	No

Operator	EP ENERGY E&P COMPANY, L.P.	**Surface Owner-APD**	Farrell and Jolene C. Farnsworth Family Trust
Well Name	Farnsworth 3-1C5	**Unit**	
Field	ALTAMONT	**Type of Work**	DRILL
Location	NESW 1 3S 5W U 1978 FSL 1534 FWL GPS Coord (UTM) 550801E 4455372N		

Geologic Statement of Basis

EP proposes to set 700 feet of conductor and 2,200 feet of surface casing both of which will be cemented to surface. The surface and intermediate holes will be drilled utilizing fresh water mud. The estimated depth to the base of moderately saline ground water is 1,300 feet. A search of Division of Water Rights records indicates that there are 25 water wells within a 10,000 foot radius of the center of Section 1. These wells probably produce water from the Duchesne River Formation and asociated alluvium. The wells are listed as being used for irrigation, stock watering, municipal, oil exploration and domestic. The proposed drilling, casing and cement program should adequately protect the highly used Duchesne River aquifer.

Brad Hill — **APD Evaluator**

9/18/2014 — **Date / Time**

Surface Statement of Basis

The operator shall divert storm water away from the fresh water pond located north of this location and construct a sediment pond as agreed to in their landowner agreement. Presently, a shallow drainage enters proposed well pad from the east between corners number 2 and 3. That drainage shall be diverted to the north and into the sediment pond rather than the fresh water pond. Silt fencing or a catchment shall also be installed below fill slope of corners number 8, 1, and 2 to prevent out washing or sediment from moving toward that pond.

A reserve pit is proposed off the south side of the location in cut. That pit shall be lined with a 20 mil synthetic liner and a felt underlayment to prevent seepage from this pit. At the completion of the drilling process this pit shall be reclaimed as per DOGM guidelines. The pit shall also be fenced to prevent wildlife or stock from entering same.

A presite was scheduled and performed on September 9, 2014 to take input and address issues regarding the construction and drilling of this well. Farrell Farnsworth was shown as the landowner of record and therefore invited to the presite. According to the landowner, he and the operator do have a surface use agreement in place.

Dennis Ingram — **Onsite Evaluator**

9/9/2014 — **Date / Time**

Conditions of Approval / Application for Permit to Drill

RECEIVED: October 09, 2014

API Well Number: 43013530970000

Category	Condition
Pits	A synthetic liner with a minimum thickness of 20 mils with a felt sub liner shall be properly installed and maintained in the reserve pit.
Pits	The reserve pit should be located on the south side of the location.
Surface	The well site shall be double bermed to prevent fluids from entering or leaving the pad; one berm around location and the other around tanks.
Surface	Silt fencing to prevent fill slopes around corners 8, 1, and toward 2 to prevent materials from leaving site toward fresh water pond. Also divert drainage from east around location and into a "to be constructed" sediment pond rather than running into fresh water pond below location.

RECEIVED: October 09, 2014

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/10/2014 **API NO. ASSIGNED:** 43013530970000

WELL NAME: Farnsworth 3-1C5

OPERATOR: EP ENERGY E&P COMPANY, L.P. (N3850) **PHONE NUMBER:** 713 997-5038

CONTACT: Maria S. Gomez

PROPOSED LOCATION: NESW 01 030S 050W **Permit Tech Review:** ☑

SURFACE: 1978 FSL 1534 FWL **Engineering Review:** ☑

BOTTOM: 1978 FSL 1534 FWL **Geology Review:** ☑

COUNTY: DUCHESNE

LATITUDE: 40.24725 **LONGITUDE:** -110.40270

UTM SURF EASTINGS: 550801.00 **NORTHINGS:** 4455372.00

FIELD NAME: ALTAMONT

LEASE TYPE: 4 - Fee

LEASE NUMBER: Fee **PROPOSED PRODUCING FORMATION(S):** GREEN RIVER(LWR)-WASATCH

SURFACE OWNER: 4 - Fee **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** STATE/FEE - 400JU0708
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** Duchesne City
- ☐ **RDCC Review:**
- ☑ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit:

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

Board Cause No: Cause 139-84

Effective Date: 12/31/2008

Siting: 4 Wells Per 640 Acres

- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhill
8 - Cement to Surface -- 2 strings - hmacdonald
12 - Cement Volume (3) - hmacdonald

GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill
****

Well Name: Farnsworth 3-1C5
API Well Number: 43013530970000
Lease Number: Fee
Surface Owner: FEE (PRIVATE)
Approval Date: 10/9/2014

Issued to:
EP ENERGY E&P COMPANY, L.P., 1001 Louisiana, Houston, TX 77002

Authority:
Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-84. The expected producing formation or pool is the GREEN RIVER(LWR)-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volumes for the 13 3/8" and 9 5/8" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

Cement volume for the 7" intermediate string shall be determined from actual hole diameter in order to place lead cement from the pipe setting depth back to 1700' and tail cement to 500' above top of Lower Green River as indicated in the submitted drilling plan.

Additional Approvals:
The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this

well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
  at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
  - contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
  801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
  801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

Approved By:

For John Rogers
Associate Director, Oil & Gas

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Carol Daniels <caroldaniels@utah.gov>

24 Hour notice after inital Spud of Well: Farnsworth 3-1C5

1 message

LANDRIG007 (Patterson 307) <LANDRIG007@epenergy.com> Fri, Jan 23, 2015 at 12:21 AM
To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, Dan Jarvis <danjarvis@utah.gov>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "Derden, Roy Lynn (Contractor)" <Roy.Derden@epenergy.com>

Jan. 23, 2015

Please be advised of 24 hour notice after initial Spud of the following well.

Well: Farnsworth 3-1C5

API# 43013530970000

Lease Number: FEE

Section: 1

T3S, R5W, USB&M NESW

Field: Altamont

County: Duchesne

State: Utah

Drilling Company: Leon Ross Drilling

Rig: Bucket Rig #35

Spudded in at 12:00 Noon Jan. 21, 2015

Steven Murphy

Rig site Supervisor

EP Energy

Patterson 307

Rig Office: 713-997-1255 or 1257

EP ENERGY

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2/1/4/2015

Subject: 24 Hour Notice Spud 8-3/4" Intermediate section on the following well.

Well Name: Farnsworth 3-1C5 NESW S-01 T03S R05W
API Well Number: 43013530970000
Field: Altamont
County: Duchesne
Mineral Owner: Fee

~~**January 4, 2015**~~ February 4, 2015 - pm Gary Miller
10:00 pm
Patterson-UTI
Rig #307 Spud 8-3/4" Intermediate (pressure test BOPE)

Best Regards

Gary Miller
Rig Site Supervisor
EP Energy LLC
C: 435-823-1725

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Carol Daniels <caroldaniels@utah.gov>

24 Hour notice Pressure test and spud 8-3/4" Intermediate.

1 message

LANDRIG007 (Patterson 307) <LANDRIG007@epenergy.com> Wed, Feb 4, 2015 at 6:59 AM
To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, Dan Jarvis <danjarvis@utah.gov>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "Derden, Roy Lynn (Contractor)" <Roy.Derden@epenergy.com>

Notice of pressure test and spud of 8-3/4" Intermediate section.

EP Energy

Patterson 307

Rig Office: 713-997-1255

EP ENERGY

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[redacted]

Carol Daniels <caroldaniels@utah.gov>

NESW SE01 T03S R05W FEE LEASE

24 hr Notice to CEMENT 5" Production Liner on Farnsworth 3-1C5 well.

1 message

LANDRIG007 (Patterson 307) <LANDRIG007@epenergy.com> Thu, Feb 19, 2015 at 5:13 AM
To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, Dan Jarvis <danjarvis@utah.gov>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "Derden, Roy Lynn (Contractor)" <Roy.Derden@epenergy.com>

RE: EP ENERGY
FARNSWORTH 3-1C5
API # 43-013-53097-00-00
DUCHESNE CO., UTAH

We intend to CEMENT 5" Production Liner on FARNSWORTH 3-1C5 well within 24 hrs.

Regards,
Eugene Parker
Well site Supervisor
Patterson 307
713-997-1255

Reset Form

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ (highlight changes) FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

1a. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ DRY ☐ OTHER

7. UNIT or CA AGREEMENT NAME

b. TYPE OF WORK: NEW WELL ☑ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

8. WELL NAME and NUMBER: Farnsworth 3-1C5

2. NAME OF OPERATOR: EP Energy E&P Company, L.P.

9. API NUMBER: 4301353097

3. ADDRESS OF OPERATOR: 1001 Louisiana CITY Houston STATE TX ZIP 77002

PHONE NUMBER: (713) 997-5038

10 FIELD AND POOL, OR WILDCAT: Altamont

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 1978' FSL & 1534' FWL
AT TOP PRODUCING INTERVAL REPORTED BELOW: 1964' FSL & 1483' FWL
AT TOTAL DEPTH: 1804' FSL & 1451' FWL

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 1 3S 5W U

12. COUNTY: Duchesne

13. STATE: UTAH

14. DATE SPUDDED: 1/21/2015

15. DATE T.D. REACHED: 2/17/2015

16. DATE COMPLETED: 3/12/2015 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): 5867

18. TOTAL DEPTH: MD 12,300 TVD 12,289

19. PLUG BACK T.D.: MD TVD

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
Sonic, Gamma Ray, Resistivity & Neutron Density

23.
WAS WELL CORED? NO ☑ YES ☐ (Submit analysis)
WAS DST RUN? NO ☑ YES ☐ (Submit report)
DIRECTIONAL SURVEY? NO ☐ YES ☑ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
17.5	13.375 J55	54.5	0	714		G 800	920	0	
12.25	9.625 N80	40	0	1,909		G 635	1,179	0	
8.75	7" P110	29	0	9,401		G 935	1,705	3706	
6.125	5" HCP1:	18	9,188	12,300		G 235	357	9188	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	8,990	8,980						

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) Wasatch	9,333	12,300	9,327	12,289
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)		SIZE	NO. HOLES	PERFORATION STATUS
11,644	11,983	.43	69	Open ☑ Squeezed ☐
11,228	11,566	.43	69	Open ☑ Squeezed ☐
10,878	11,184	.43	69	Open ☑ Squeezed ☐
10,595	10,847	.43	69	Open ☑ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. See attached for further information on #27 & #28.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
11644-11983	5000 gal 15% HCL acid, 3000# 100 mesh, 150010# 30/50 THS
11228-11566	5000 gal 15% HCL acid, 3000# 100 mesh, 150100# 30/50 THS
10878-11184	5000 gal 15% HCL acid, 3000# 100 mesh, 150200# 30/50 THS

29. ENCLOSED ATTACHMENTS: All logs are submitted to UDOGM by vendor.

☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☐ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER:

30. WELL STATUS: Prod

(5/2000)

(CONTINUED ON BACK)

RECEIVED: Apr. 01, 2015

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
3/13/2015	3/23/2015	24		891	1,659	296	FL

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:
18	2,544	0	45.00	1	2		891	1,659	296	PROD

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Sold

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Upper Green River	4,438
				Middle Green River	6,121
				Lower Green River	7,529
				Wasatch	9,333

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Maria S. Gomez TITLE Principal Regulatory Analyst

SIGNATURE Maria S. Gomez Digitally signed by Maria Gomez DN: cn=Maria Gomez, o=EP Energy, ou=Regulatory, email=maria.gomez@epenergy.com, c=US Date: 2015.04.01 19:23:36 -05'00' DATE 4/1/2015

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

RECEIVED: Apr. 01, 2015

Attachment to Well Completion Report

Form 8 Dated April 1, 2015

Well Name: Farnsworth 3-1C5

Items #27 and #28 Continued

27. Perforation Record

Interval (Top/Bottom – MD)	Size	No. of Holes	Perf. Status
10284’-10553’	.43	69	Open
9976’-10256’	.43	69	Open
9666’-9945’	.43	69	Open
9388’-9633’	.43	69	Open

28. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
10595’-10847’	5000 gal acid, 3000# 100 mesh, 151190# 30/50 TLC
10284’-10553’	5000 gal acid, 3000# 100 mesh, 150040# 30/50 TLC
9976’-10256’	5000 gal acid, 3000# 100 mesh, 150010# 30/50 TLC
9666’-9945’	5000 gal acid, 3000# 100 mesh, 150025# 30/50 TLC
9388’-9633’	5000 gal acid, 3580# 100 mesh, 150025# 30/50 TLC

RECEIVED: Apr. 01, 2015

EP ENERGY

Company:	EP Energy	**Job Number:**		**Calculation Method**	Minimum Curvature
Well:	Farnsworth 3-1C5	**Mag Decl.:**		**Proposed Azimuth**	0.00
Location:	Duchesne, UT	**Dir Driller:**		**Depth Reference**	KB
Rig:	Patterson 307	**MWD Eng:**		**Tie Into:**	Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)		Coordinates E/W (ft)		Closure Distance (ft)	Closure Direction Azimuth	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
Tie In	**0.00**	**0.00**	**0.00**												
1	100.00	0.20	50.69	100.00	100.00	0.11	0.11	N	0.14	E	0.18	50.69	0.20	0.20	50.69
2	200.00	0.28	311.40	100.00	200.00	0.39	0.39	N	0.09	E	0.40	12.49	0.37	0.08	260.72
3	300.00	1.17	309.55	100.00	299.99	1.20	1.20	N	0.89	W	1.49	323.53	0.88	0.88	-1.85
4	400.00	1.00	319.02	100.00	399.97	2.51	2.51	N	2.25	W	3.37	318.16	0.24	-0.17	9.47
5	500.00	0.71	303.04	100.00	499.96	3.51	3.51	N	3.34	W	4.84	316.40	0.38	-0.29	-15.97
6	600.00	0.50	333.72	100.00	599.96	4.24	4.24	N	4.05	W	5.86	316.27	0.38	-0.21	30.68
7	700.00	0.48	7.80	100.00	699.95	5.04	5.04	N	4.19	W	6.55	320.29	0.29	-0.02	-325.92
8	800.00	0.36	4.76	100.00	799.95	5.77	5.77	N	4.10	W	7.08	324.57	0.13	-0.13	-3.05
9	900.00	0.50	28.79	100.00	899.95	6.46	6.46	N	3.87	W	7.53	329.10	0.23	0.15	24.03
10	1000.00	0.28	10.48	100.00	999.94	7.09	7.09	N	3.61	W	7.96	333.00	0.25	-0.22	-18.31
11	1100.00	0.68	350.42	100.00	1099.94	7.92	7.92	N	3.67	W	8.72	335.15	0.42	0.40	339.94
12	1200.00	0.72	331.02	100.00	1199.93	9.05	9.05	N	4.07	W	9.92	335.79	0.24	0.04	-19.41
13	1300.00	0.77	313.89	100.00	1299.92	10.06	10.06	N	4.85	W	11.17	334.24	0.23	0.05	-17.13
14	1400.00	0.85	317.34	100.00	1399.91	11.07	11.07	N	5.84	W	12.51	332.19	0.09	0.08	3.44
15	1500.00	1.05	325.66	100.00	1499.90	12.36	12.36	N	6.85	W	14.13	331.01	0.24	0.20	8.33
16	1600.00	0.94	311.26	100.00	1599.89	13.66	13.66	N	7.98	W	15.82	329.70	0.27	-0.11	-14.41
17	1700.00	1.20	302.27	100.00	1699.87	14.76	14.76	N	9.48	W	17.54	327.27	0.31	0.27	-8.98
18	1800.00	1.15	305.92	100.00	1799.85	15.90	15.90	N	11.18	W	19.44	324.89	0.09	-0.06	3.65
19	1829.00	1.17	305.86	29.00	1828.84	16.25	16.25	N	11.66	W	20.00	324.34	0.09	0.09	-0.20
20	1960.00	0.97	329.06	131.00	1959.82	17.98	17.98	N	13.31	W	22.37	323.49	0.36	-0.15	17.71
21	2056.00	2.84	7.55	96.00	2055.76	21.04	21.04	N	13.42	W	24.95	327.47	2.26	1.95	-334.91
22	2151.00	2.58	9.30	95.00	2150.66	25.48	25.48	N	12.76	W	28.50	333.39	0.29	-0.27	1.84
23	2247.00	2.54	7.72	96.00	2246.56	29.72	29.72	N	12.13	W	32.10	337.80	0.08	-0.04	-1.65
24	2343.00	2.31	16.34	96.00	2342.48	33.69	33.69	N	11.30	W	35.53	341.46	0.45	-0.24	8.98
25	2439.00	2.14	15.99	96.00	2438.40	37.27	37.27	N	10.26	W	38.65	344.61	0.18	-0.18	-0.36
26	2534.00	1.96	9.69	95.00	2533.34	40.57	40.57	N	9.50	W	41.67	346.82	0.30	-0.19	-6.63
27	2630.00	1.58	9.54	96.00	2629.30	43.50	43.50	N	9.00	W	44.42	348.31	0.40	-0.40	-0.16
28	2725.00	1.27	21.28	95.00	2724.27	45.77	45.77	N	8.40	W	46.53	349.60	0.45	-0.33	12.36
29	2820.00	1.31	10.71	95.00	2819.24	47.82	47.82	N	7.82	W	48.45	350.71	0.25	0.04	-11.13
30	2915.00	1.42	4.66	95.00	2914.22	50.06	50.06	N	7.52	W	50.62	351.45	0.19	0.12	-6.37
31	3010.00	1.12	341.18	95.00	3009.19	52.11	52.11	N	7.73	W	52.68	351.57	0.63	-0.32	354.23
32	3105.00	1.96	19.02	95.00	3104.16	54.52	54.52	N	7.50	W	55.04	352.17	1.34	0.88	-339.12
33	3201.00	1.28	39.30	96.00	3200.12	56.90	56.90	N	6.28	W	57.25	353.70	0.92	-0.71	21.13
34	3296.00	0.76	104.89	95.00	3295.11	57.56	57.56	N	5.00	W	57.78	355.03	1.25	-0.55	69.04
35	3391.00	1.48	40.44	95.00	3390.10	58.34	58.34	N	3.60	W	58.45	356.47	1.41	0.76	-67.84

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EP ENERGY

Company:	EP Energy	**Job Number:**	
Well:	Farnsworth 3-1C5	**Mag Decl.:**	
Location:	Duchesne, UT	**Dir Driller:**	
Rig:	Patterson 307	**MWD Eng:**	

Calculation Method	Minimum Curvature
Proposed Azimuth	0.00
Depth Reference	KB
Tie Into:	Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)		Coordinates E/W (ft)		Closure Distance (ft)	Closure Direction Azimuth	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
36	3486.00	0.98	28.61	95.00	3485.07	59.98	59.98	N	2.41	W	60.03	357.70	0.59	-0.53	-12.45
37	3582.00	3.15	13.86	96.00	3581.01	63.26	63.26	N	1.39	W	63.28	358.74	2.31	2.26	-15.36
38	3677.00	2.51	17.85	95.00	3675.89	67.78	67.78	N	0.12	W	67.78	359.90	0.70	-0.67	4.20
39	3772.00	1.88	12.01	95.00	3770.82	71.28	71.28	N	0.84	E	71.29	0.67	0.70	-0.66	-6.15
40	3868.00	1.08	13.54	96.00	3866.79	73.70	73.70	N	1.38	E	73.72	1.07	0.83	-0.83	1.59
41	3963.00	1.97	11.09	95.00	3961.75	76.18	76.18	N	1.90	E	76.20	1.43	0.94	0.94	-2.58
42	4058.00	1.35	28.69	95.00	4056.71	78.76	78.76	N	2.75	E	78.81	2.00	0.84	-0.65	18.53
43	4154.00	0.56	1.26	96.00	4152.70	80.22	80.22	N	3.31	E	80.29	2.36	0.93	-0.82	-28.57
44	4249.00	1.99	7.66	95.00	4247.67	82.32	82.32	N	3.54	E	82.40	2.46	1.51	1.51	6.74
45	4345.00	0.82	23.68	96.00	4343.64	84.60	84.60	N	4.03	E	84.70	2.73	1.27	-1.22	16.69
46	4410.37	1.86	353.96	65.37	4408.99	86.08	86.08	N	4.11	E	86.18	2.73	1.86	1.59	505.25
47	4441.00	2.40	349.41	30.63	4439.60	87.21	87.21	N	3.94	E	87.30	2.59	1.85	1.76	-14.85
48	4537.00	1.82	341.28	96.00	4535.54	90.63	90.63	N	3.08	E	90.68	1.95	0.68	-0.60	-8.47
49	4632.00	1.35	310.06	95.00	4630.50	92.78	92.78	N	1.74	E	92.79	1.08	1.02	-0.49	-32.86
50	4727.00	1.21	281.66	95.00	4725.48	93.70	93.70	N	0.10	W	93.70	359.94	0.68	-0.15	-29.89
51	4823.00	1.29	320.47	96.00	4821.46	94.74	94.74	N	1.78	W	94.76	358.92	0.87	0.08	40.43
52	4919.00	1.90	351.04	96.00	4917.42	97.15	97.15	N	2.71	W	97.18	358.40	1.07	0.64	31.84
53	5013.00	1.33	334.48	94.00	5011.39	99.67	99.67	N	3.43	W	99.73	358.03	0.78	-0.61	-17.62
54	5109.00	1.63	342.76	96.00	5107.35	101.98	101.98	N	4.31	W	102.07	357.58	0.38	0.31	8.62
55	5204.00	1.74	342.65	95.00	5202.31	104.65	104.65	N	5.14	W	104.77	357.19	0.12	0.12	-0.12
56	5210.69	1.69	341.22	6.69	5209.00	104.84	104.84	N	5.20	W	104.96	357.16	0.98	-0.75	-21.38
57	5210.69	1.69	341.22	0.00	5209.00	104.84	104.84	N	5.20	W	104.96	357.16	#DIV/0!	#DIV/0!	#DIV/0!
58	5298.00	1.17	312.13	87.31	5296.28	106.65	106.65	N	6.28	W	106.84	356.63	1.00	-0.60	-33.32
59	5394.00	2.77	5.83	96.00	5392.23	109.62	109.62	N	6.77	W	109.83	356.47	2.38	1.67	-319.06
60	5490.00	1.70	359.48	96.00	5488.16	113.35	113.35	N	6.55	W	113.54	356.69	1.14	-1.11	368.39
61	5585.00	1.00	332.53	95.00	5583.13	115.49	115.49	N	6.94	W	115.70	356.56	0.98	-0.74	-28.37
62	5681.00	2.86	12.02	96.00	5679.07	118.58	118.58	N	6.83	W	118.78	356.70	2.27	1.94	-333.86
63	5776.00	1.73	1.84	95.00	5774.00	122.33	122.33	N	6.29	W	122.49	357.06	1.26	-1.19	-10.72
64	5871.00	0.69	336.77	95.00	5868.97	124.29	124.29	N	6.47	W	124.46	357.02	1.20	-1.09	352.56
65	5966.00	0.36	249.27	95.00	5963.97	124.71	124.71	N	6.98	W	124.91	356.80	0.80	-0.35	-92.11
66	6061.00	1.38	197.85	95.00	6058.96	123.52	123.52	N	7.61	W	123.75	356.48	1.25	1.07	-54.13
67	6157.00	2.08	191.03	96.00	6154.92	120.71	120.71	N	8.29	W	120.99	356.07	0.76	0.73	-7.10
68	6191.10	2.13	191.24	34.10	6188.99	119.48	119.48	N	8.54	W	119.78	355.91	0.15	0.15	0.62
69	6252.00	2.21	191.60	60.90	6249.85	117.22	117.22	N	8.99	W	117.56	355.61	0.13	0.13	0.59
70	6347.00	2.45	185.23	95.00	6344.77	113.40	113.40	N	9.55	W	113.80	355.19	0.37	0.25	-6.71
71	6442.00	2.60	182.37	95.00	6439.68	109.23	109.23	N	9.82	W	109.67	354.86	0.21	0.16	-3.01
72	6538.00	2.54	186.93	96.00	6535.58	104.94	104.94	N	10.17	W	105.43	354.47	0.22	-0.06	4.75

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EP ENERGY

Company:	EP Energy	**Job Number:**	
Well:	Farnsworth 3-1C5	**Mag Decl.:**	
Location:	Duchesne, UT	**Dir Driller:**	
Rig:	Patterson 307	**MWD Eng:**	

Calculation Method	Minimum Curvature
Proposed Azimuth	0.00
Depth Reference	KB
Tie Into:	Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)		Coordinates E/W (ft)		Closure Distance (ft)	Closure Direction Azimuth	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
73	6633.00	2.32	192.76	95.00	6630.50	100.97	100.97	N	10.84	W	101.55	353.87	0.35	-0.23	6.14
74	6728.00	2.66	204.77	95.00	6725.41	97.10	97.10	N	12.19	W	97.86	352.84	0.65	0.36	12.64
75	6824.00	2.43	200.17	96.00	6821.31	93.16	93.16	N	13.83	W	94.18	351.56	0.32	-0.24	-4.79
76	6918.00	3.14	188.92	94.00	6915.20	88.75	88.75	N	14.91	W	89.99	350.46	0.95	0.76	-11.97
77	7014.00	3.09	182.56	96.00	7011.06	83.57	83.57	N	15.44	W	84.98	349.53	0.36	-0.05	-6.62
78	7109.00	3.04	183.13	95.00	7105.92	78.49	78.49	N	15.69	W	80.05	348.70	0.06	-0.05	0.60
79	7204.00	2.98	181.49	95.00	7200.79	73.51	73.51	N	15.89	W	75.21	347.80	0.11	-0.06	-1.73
80	7300.00	2.89	182.57	96.00	7296.67	68.60	68.60	N	16.06	W	70.45	346.82	0.11	-0.09	1.12
81	7396.00	3.01	185.99	96.00	7392.54	63.67	63.67	N	16.44	W	65.76	345.53	0.22	0.13	3.56
82	7492.00	3.14	186.76	96.00	7488.40	58.56	58.56	N	17.01	W	60.98	343.80	0.14	0.14	0.80
83	7587.00	3.05	191.04	95.00	7583.26	53.49	53.49	N	17.80	W	56.38	341.60	0.26	-0.09	4.51
84	7652.82	2.83	193.34	65.82	7649.00	50.19	50.19	N	18.51	W	53.50	339.76	0.38	-0.33	3.49
85	7681.00	2.74	194.43	28.18	7677.14	48.86	48.86	N	18.84	W	52.37	338.92	0.37	-0.32	3.87
86	7777.00	3.02	191.84	96.00	7773.02	44.17	44.17	N	19.93	W	48.45	335.71	0.32	0.29	-2.70
87	7871.00	3.08	196.74	94.00	7866.89	39.32	39.32	N	21.16	W	44.66	331.71	0.28	0.06	5.21
88	7965.00	3.17	201.88	94.00	7960.75	34.49	34.49	N	22.86	W	41.38	326.47	0.31	0.10	5.47
89	8061.00	3.03	199.53	96.00	8056.61	29.64	29.64	N	24.70	W	38.58	320.20	0.20	-0.15	-2.45
90	8156.00	2.96	203.07	95.00	8151.48	25.02	25.02	N	26.50	W	36.44	313.35	0.21	-0.07	3.73
91	8251.00	3.04	200.73	95.00	8246.35	20.40	20.40	N	28.35	W	34.93	305.74	0.15	0.08	-2.46
92	8348.00	3.53	198.78	97.00	8343.19	15.17	15.17	N	30.22	W	33.82	296.65	0.52	0.51	-2.01
93	8443.00	3.51	200.19	95.00	8438.01	9.67	9.67	N	32.17	W	33.59	286.73	0.09	-0.02	1.48
94	8538.00	2.81	204.68	95.00	8532.86	4.83	4.83	N	34.14	W	34.48	278.05	0.78	-0.74	4.73
95	8633.00	2.54	202.47	95.00	8627.76	0.77	0.77	N	35.92	W	35.93	271.22	0.30	-0.28	-2.33
96	8728.00	2.68	201.91	95.00	8722.66	-3.24	3.24	S	37.55	W	37.69	265.07	0.15	0.15	-0.59
97	8824.00	2.62	205.02	96.00	8818.56	-7.31	7.31	S	39.32	W	39.99	259.47	0.16	-0.06	3.24
98	8919.00	2.42	210.36	95.00	8913.47	-11.01	11.01	S	41.25	W	42.70	255.06	0.32	-0.21	5.62
99	9014.00	1.26	248.50	95.00	9008.42	-13.12	13.12	S	43.24	W	45.18	253.12	1.71	-1.22	40.15
100	9110.00	1.20	273.89	96.00	9104.40	-13.44	13.44	S	45.22	W	47.18	253.45	0.57	-0.06	26.45
101	9206.00	1.32	267.04	96.00	9200.38	-13.43	13.43	S	47.33	W	49.20	254.16	0.20	0.13	-7.14
102	9304.64	1.01	258.24	98.64	9299.00	-13.67	13.67	S	49.31	W	51.17	254.51	0.36	-0.31	-8.92
103	9339.00	0.91	253.81	34.36	9333.35	-13.80	13.80	S	49.87	W	51.75	254.53	0.36	-0.29	-12.89
104	9901.00	2.50	240.00	562.00	9895.09	-21.18	21.18	S	64.78	W	68.15	251.90	0.29	0.28	-2.46
105	10000.00	2.62	219.23	99.00	9993.99	-24.01	24.01	S	68.07	W	72.18	250.57	0.94	0.12	-20.98
106	10100.00	2.77	198.45	100.00	10093.88	-28.07	28.07	S	70.28	W	75.68	248.23	0.98	0.15	-20.78
107	10200.00	3.07	187.80	100.00	10193.75	-33.01	33.01	S	71.41	W	78.67	245.19	0.62	0.30	-10.65
108	10300.00	2.74	187.39	100.00	10293.62	-38.03	38.03	S	72.08	W	81.50	242.18	0.33	-0.33	-0.41
109	10400.00	3.29	184.62	100.00	10393.48	-43.27	43.27	S	72.62	W	84.53	239.21	0.57	0.55	-2.77

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EP ENERGY

Company:	EP Energy	**Job Number:**		**Calculation Method**	Minimum Curvature
Well:	Farnsworth 3-1C5	**Mag Decl.:**		**Proposed Azimuth**	0.00
Location:	Duchesne, UT	**Dir Driller:**		**Depth Reference**	KB
Rig:	Patterson 307	**MWD Eng:**		**Tie Into:**	Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)		Coordinates E/W (ft)		Closure Distance (ft)	Closure Direction Azimuth	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
110	10500.00	3.45	184.87	100.00	10493.31	-49.12	49.12	S	73.10	W	88.07	236.10	0.15	0.15	0.25
111	10600.00	3.54	182.13	100.00	10593.13	-55.20	55.20	S	73.47	W	91.90	233.08	0.19	0.10	-2.74
112	10700.00	3.35	180.57	100.00	10692.95	-61.21	61.21	S	73.62	W	95.74	230.26	0.22	-0.19	-1.55
113	10800.00	3.42	181.80	100.00	10792.77	-67.11	67.11	S	73.74	W	99.71	227.70	0.10	0.07	1.23
114	10900.00	3.49	181.57	100.00	10892.59	-73.13	73.13	S	73.92	W	103.98	225.31	0.07	0.07	-0.23
115	11000.00	3.73	184.33	100.00	10992.39	-79.41	79.41	S	74.25	W	108.71	223.08	0.30	0.24	2.75
116	11100.00	3.80	184.89	100.00	11092.18	-85.95	85.95	S	74.77	W	113.92	221.02	0.08	0.08	0.56
117	11200.00	4.05	184.33	100.00	11191.94	-92.78	92.78	S	75.32	W	119.51	219.07	0.26	0.25	-0.55
118	11300.00	3.89	181.32	100.00	11291.70	-99.69	99.69	S	75.67	W	125.16	217.20	0.27	-0.17	-3.02
119	11400.00	4.03	184.49	100.00	11391.46	-106.58	106.58	S	76.02	W	130.92	215.50	0.26	0.14	3.17
120	11500.00	4.30	183.51	100.00	11491.20	-113.82	113.82	S	76.52	W	137.15	213.91	0.28	0.27	-0.98
121	11600.00	4.93	181.15	100.00	11590.87	-121.85	121.85	S	76.84	W	144.06	212.24	0.66	0.63	-2.36
122	11700.00	4.61	182.66	100.00	11690.53	-130.16	130.16	S	77.11	W	151.29	210.64	0.34	-0.32	1.51
123	11800.00	4.52	189.84	100.00	11790.21	-138.06	138.06	S	77.97	W	158.55	209.46	0.58	-0.09	7.18
124	11900.00	4.36	186.82	100.00	11889.91	-145.71	145.71	S	79.10	W	165.80	208.49	0.28	-0.16	-3.02
125	12000.00	4.21	188.53	100.00	11989.63	-153.12	153.12	S	80.09	W	172.80	207.61	0.20	-0.15	1.71
126	12120.00	4.08	187.65	120.00	12109.32	-161.70	161.70	S	81.31	W	181.00	206.70	0.12	-0.11	-0.73
127	12300.00	4.08	187.65	180.00	12288.86	-174.39	174.39	S	83.02	W	193.15	205.46	0.00	0.00	0.00

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CENTRAL DIVISION

ALTAMONT FIELD
FARNSWORTH 3-1C5
FARNSWORTH 3-1C5
DRILLING LAND

Operation Summary Report

RECEIVED: Apr. 01, 2015

1 General

1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	FARNSWORTH 3-1C5		
Project	ALTAMONT FIELD	**Site**	FARNSWORTH 3-1C5
Rig Name/No.	PATTERSON/307	**Event**	DRILLING LAND
Start date	1/21/2015	**End date**	
Spud Date/Time	2/6/2015	**UWI**	FARNSWORTH 3-1C5
Active datum	KB @5,888.8ft (above Mean Sea Level)		
Afe No./Description	160741/53159 / FARNSWORTH 3-1C5		

2 Summary

2.1 Operation Summary

Date	Time Start-End		Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
2/3/2015	6:00	6:00	24.00	MIRU	01		P	1,936.0	MIRU. 90% MOVED IN. 30% RIGGED UP.
2/4/2015	6:00	6:00	24.00	MIRU	01		P	1,936.0	MIRU. 100% MOVED IN. 60% RIGGED UP. 11" 10M BOPE IS ON WELL HEAD & B-SECTION.
2/5/2015	6:00	20:00	14.00	MIRU	01		P	1,936.0	RIG UP TOP DRIVE. PERFORMED S & E INSPECTION. RIG ON DAY RATE @ 20:00 HRS. 02/04/2015
	20:00	2:00	6.00	CASSURF	28		P	1,936.0	TEST CHOKE MANIFOLD TO 10,000 PSI WHILE NIPPLE UP BOPE STACK WITH 10K ANNULAR / DOUBLE GATE & SINGLE GATE.
	2:00	5:00	3.00	CASSURF	28		P	1,936.0	TORQUE ALL BOLTS ON BOPE.
	5:00	6:00	1.00	CASSURF	19		P	1,936.0	PRESSURE TEST BOPE TESTED ANNULAR TO 250 PSI LOW/4,000 PSI HIGH. REMAINDER BOPE TESTED TO 250 PSI LOW/5,000 PSI HIGH & HELD >10 MINUTES EACH TEST.
2/6/2015	6:00	14:00	8.00	DRLINT1	19		P	1,936.0	PJSM. TEST RAMS , CHOKE MANIFOLD, AND UPPER / LOWER KELLY VALVES TO 250/5000 PSI AND HOLD FOR 10 MINUTES. TEST THE ANNULAR PREVENTER TO 250/4000 PSI AND HOLD FOR 10 MINUTES. CHART ALL TESTS.
	14:00	14:30	0.50	DRLINT1	31		P	1,936.0	P. TEST CASING 2500 PSI / 30 MINUTES. OK
	14:30	16:00	1.50	DRLINT1	19		P	1,936.0	RIG DOWN WEATHERFORD, INSTALL WEAR BUSHING.
	16:00	21:00	5.00	DRLINT1	42		P	1,936.0	NU ROTATING HEAD AND FLOW LINE.
	21:00	23:30	2.50	DRLINT1	14		P	1,936.0	PICK UP BHA.
	23:30	0:00	0.50	DRLINT1	42		P	1,936.0	INSTALL ROTATING HEAD RUBBER.
	0:00	1:30	1.50	DRLINT1	14		P	1,936.0	TRIP IN HOLE PICKING UP 5" DRILL PIPE.
	1:30	2:00	0.50	DRLINT1	72		P	1,936.0	DRILL CEMENT & SHOE TRACK .
	2:00	3:00	1.00	DRLINT1	33		P	1,936.0	SPUD WELL @ 02:00 HRS ON 02/06/2015 DRILL 10' OF NEW FORMATION, CIRC & CONDITION MUD. PERFORM F.I.T. TO 15.4 PPG E.M.W. WITH 625 PSI
	3:00	6:00	3.00	DRLINT1	07		P	1,946.0	DRILL F/ 1,968' TO 2,122'.
2/7/2015	6:00	16:30	10.50	DRLINT1	07		P	2,122.0	DRILLING FROM 2122' TO 3,648'.
	16:30	17:00	0.50	DRLINT1	12		P	3,648.0	RIG SERVICE.
	17:00	6:00	13.00	DRLINT1	07		P	3,648.0	DRILLING FROM 3648' TO 4,985'.
2/8/2015	6:00	15:00	9.00	DRLINT1	07		P	4,985.0	DRILLING FROM 4985' TO 5839'
	15:00	15:30	0.50	DRLINT1	12		P	5,839.0	RIG SERVICE.
	15:30	6:00	14.50	DRLINT1	07		P	5,839.0	DRILLING FROM 5839' TO 7,374'.
2/9/2015	6:00	16:00	10.00	DRLINT1	07		P	7,374.0	DRILLING FROM 7374' TO 8314'.

2.1 Operation Summary (Continued)

Date	Time Start-End		Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	16:00	16:30	0.50	DRLINT1	12		P	8,314.0	RIG SERVICE.
	16:30	6:00	13.50	DRLINT1	07		P	8,314.0	DRILLING FROM 8314' TO 9,150'.
2/10/2015	6:00	7:30	1.50	DRLINT1	07		P	9,008.0	DRILLING FROM 9008' TO 9173'.
	7:30	8:00	0.50	DRLINT1	12		P	9,173.0	RIG SERVICE.
	8:00	13:00	5.00	DRLINT1	07		P	9,173.0	DRILLING FROM 9173' TO 9401'.
	13:00	14:00	1.00	DRLINT1	15		P	9,401.0	CIRCULATE TO LD DIRECTIONAL TOOLS.
	14:00	2:00	12.00	DRLINT1	13		P	9,401.0	TOH TO LD DIRECTIONAL TOOLS. TIGHT FROM 7870'. BACK REAM FROM 7860'-7765'. 6595'-6403'. 6150'-6003'. 4366'-4300'.
	2:00	2:30	0.50	DRLINT1	42		P	9,401.0	CLEAN & STRAIGHTEN RIG FLOOR.
	2:30	6:00	3.50	DRLINT1	13		P	9,401.0	MAKE UP BIT AND TRIP IN HOLE.
2/11/2015	6:00	12:00	6.00	DRLINT1	13		P	9,401.0	TRIP IN HOLE TO 6474'. HARD REAMING FROM 6475' TO 6510'. REAM FROM 6511' TO 6800'. RUN FROM DERRICK FROM 6801' TO 7515'. REAM FROM 7516' TO 7780'. RUN FROM 7781' TO 8950'. WASH AND REAM TO BOTTOM. (8951'-9401')
	12:00	13:30	1.50	DRLINT1	15		P	9,401.0	CIRCULATE TO LDDP.
	13:30	21:00	7.50	DRLINT1	14		P	9,401.0	PULL OUT OF HOLE LAYING DOWN DRILL PIPE.
	21:00	23:00	2.00	DRLINT1	14		P	9,401.0	LAY DOWN BHA.
	23:00	23:30	0.50	DRLINT1	42		P	9,401.0	PULL WEAR BUSHING.
	23:30	6:00	6.50	DRLINT1	42		P	9,401.0	RIG UP WEATHERFORD LOGGERS AND LOG WELL WITH ULTRA SLIM QUAD COMBO. SET DOWN @ 8,210' COULD NOT WORK PAST. LOG OUT FROM 8,210'.
2/12/2015	6:00	8:00	2.00	EVLINT1	22		P	9,401.0	LOGGING WITH WEATHERFORD
	8:00	9:00	1.00	EVLINT1	22		P	9,401.0	RIG DOWN LOGGERS
	9:00	15:30	6.50	CASINT1	24		P	9,401.0	PJSM WITH FRANKS WESTATES, RU CASING CREW. RUN 7" INTERMEDIATE CASING. CIRCULATE BU AT 1000', 2000'. TIH TO 3000'.
	15:30	17:00	1.50	CASINT1	52		P	9,401.0	WORKING PIPE, PARTIAL RETURNS
	17:00	18:00	1.00	CASINT1	15		P	9,401.0	CIRCULATE BU AT 3000', BUILD VOLUME.
	18:00	6:00	12.00	CASINT1	24		P	9,401.0	RUN 7" CASING, BREAK CIRC PER 500' CIRC B/UP PER 1000'.
2/13/2015	6:00	13:00	7.00	CASINT1	24		P	9,401.0	RUNNING 7" CASING. CIRCULATE BU AT 8000', 8500', AND 9000'. TIH TO 9401
	13:00	14:00	1.00	CASINT1	15		P	9,401.0	CIRCULATE BU AND RU HALLIBURTON.
	14:00	17:30	3.50	CASINT1	25		P	9,401.0	PJSM. PRESSURE TEST ALL LINES TO 5000 PSI. OK. CEENT WITH 40 BBLS TUNED SPACER (11.5 PPG 3.68 YIELD 21.9 GAL/SK WATER) 223 BBLS LEAD (660 SACKS 12.5 PPG 1.9 YIELD 10.27 GAL/SK WATER) 80 BBLS TAIL (275 SACKS 13.0 PPG 1.64 YIELD 8.17 GAL/SK WATER) DISPLACED WITH 347 BBLS OF 10.2 PPG DRILLING MUD. PLUG BUMPED. PRESSURE PRIOR TO BUMPING 1147 PSI. PRESSURED 500 PSI OVER. FLOATS HELD. FLOWED BACK 2 BBLS. 20 BBLS OF SPACER BACK TO SURFACE.
	17:30	18:30	1.00	CASINT1	42		P	9,401.0	RIG DOWN HALLIBURTON.
	18:30	19:30	1.00	CASINT1	42		P	9,401.0	FLUSHED OUT STACK WITH FW. LANDED CASING ON HANGER WITH NEUTRAL WT AT 210K.
	19:30	21:30	2.00	CASINT1	27		P	9,401.0	INSTALLED AND LOCKED PACKOFF. TESTED PACKOFF TO 5,000 PSI FOR >10 MINUTES.
	21:30	3:30	6.00	CASINT1	30		P	9,401.0	TESTED ANNULAR 250 PSI LOW / 5,000 PSI HIGH. TESTED FLOOR VALVES & REMAINDER OF 11" 10 M BOPE 250 LOW & 10,000 PSI. HELD ALL TESTS >10 MINUTES.
	3:30	4:30	1.00	CASINT1	45		P	9,401.0	TESTED CSG TO 2,500 PSI FOR 30 MINUTES.
	4:30	6:00	1.50	CASINT1	14		P	9,401.0	PICK UP BHA.
2/14/2015	6:00	14:00	8.00	DRLPRD	13		P	9,401.0	PU BHA. PU 4" DP. FILL PIPE AND BREAK CIRCULATION AT 3000' AND 6000'. PARTIALLY PLUGGED BIT AT 6000'
	14:00	17:30	3.50	DRLPRD	71		N	9,401.0	TOH TO UNPLUG BIT

2.1 Operation Summary (Continued)

Date	Time Start-End		Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	17:30	19:00	1.50	DRLPRD	71		N	9,401.0	UNPLUG BIT. SMALL AMOUNT OF FINE SHALE AND CHUNK OF RUBBER IN BIT.
	19:00	22:00	3.00	DRLPRD	71		N	9,401.0	TRIP IN HOLE TO 6085.
	22:00	23:30	1.50	DRLPRD	14		P	9,401.0	TRIP IN HOLE PICKING UP DRILL PIPE.
	23:30	3:00	3.50	DRLPRD	71		N	9,401.0	PULL OUT OF HOLE DUE TO PLUGGED BIT.
	3:00	4:00	1.00	DRLPRD	71		N	9,401.0	UNPLUG BIT PACKED WITH FINE CUTTINGS.
	4:00	6:00	2.00	DRLPRD	71		N	9,401.0	TRIP IN HOLE BREAK CIRC. PER 1000'.
2/15/2015	6:00	7:00	1.00	DRLPRD	71		N	9,401.0	TIH WITH 4" DP
	7:00	7:30	0.50	DRLPRD	45		N	9,401.0	WORKING ON PUMPS
	7:30	10:00	2.50	DRLPRD	13		P	9,401.0	TIH WITH 4" DP, FILLING DP AND CIRCULATING DP VOLUME EVERY 1000'
	10:00	13:00	3.00	DRLPRD	14		P	9,401.0	PU 4" DP
	13:00	15:00	2.00	DRLPRD	72		P	9,401.0	DRILLING PLUG, FC, CEMENT AND SHOE. TAGGED FC AT 9342'. DRILL 10' OF NEW HOLE
	15:00	15:30	0.50	DRLINT5	15		P	9,410.0	CIRCULATE BU FOR FIT
	15:30	18:30	3.00	DRLPRD	47		N	9,410.0	PASON DOWN, TROUBLESHOOT .
	18:30	19:00	0.50	DRLPRD	33		P	9,410.0	PERFORM F.I.T. E.M.W. 14.5 PPG WITH 1480 PSI ADDED SURFACE PRESSURE.
	19:00	2:30	7.50	DRLPRD	07		P	9,410.0	DRILL FROM 9,410' TO 9,946'.
	2:30	3:00	0.50	DRLPRD	15		P	9,946.0	CIRC & CONDITION MUD FOR INC. SURVEY.
	3:00	4:30	1.50	DRLPRD	11		P	9,946.0	SINGLE SHOT SURVEY @ 9,901'. INC 2.5
	4:30	6:00	1.50	DRLPRD	07		P	9,946.0	DRILL FROM 9,946' TO 10,016'.
2/16/2015	6:00	6:00	24.00	DRLPRD	07		P	10,016.0	DRILLING FROM 10,016' TO 11,121'.
2/17/2015	6:00	13:00	7.00	DRLPRD	07		P	11,121.0	DRILLING FROM 11,121' TO 11,344'.
	13:00	13:30	0.50	DRLPRD	12		P	11,344.0	RIG SERVICE.
	13:30	6:00	16.50	DRLPRD	07		P	11,344.0	DRILLING FROM 11,344' TO 11,974'.
2/18/2015	6:00	14:00	8.00	DRLPRD	07		P	11,974.0	DRILLING FROM 11,974' TO 12,283'.
	14:00	14:30	0.50	DRLPRD	12		P	12,283.0	RIG SERVICE.
	14:30	15:00	0.50	DRLPRD	07		P	12,283.0	DRILLING FROM 12,283' TO 12,300'.
	15:00	16:30	1.50	EVLPRD	15		P	12,300.0	SIMULATE CONNECTION, MIX HIGH VISCOSITY SWEEP, CIRCULATE SWEEP.
	16:30	19:30	3.00	EVLPRD	13		P	12,300.0	FLOW CHECK, SHORT TRIP TO CASING SHOE.
	19:30	21:00	1.50	EVLPRD	15		P	12,300.0	CIRC. & CONDT. MUD FOR LOGS.
	21:00	2:00	5.00	EVLPRD	13		P	12,300.0	PUMP SLUG & PULL OUT OF HOLE FOR LOGS.
	2:00	4:30	2.50	EVLPRD	14		P	12,300.0	PULL RH - L/D BHA.
	4:30	6:00	1.50	EVLPRD	22		P	12,300.0	RU. RIH WFT ULTRA-SLIM QUAD-COMBO LOGS.
2/19/2015	6:00	15:00	9.00	EVLPRD	22		P	12,300.0	LOGGING WITH WEATHERFORD. LOGGERS TAGGED 11,855'. LOGGED OUT.
	15:00	20:30	5.50	CASPRD1	24		P	12,300.0	PJSM. RU FRANK'S WESTATES' TOOLS. MU 5" SHOE TRACK, CHECKED FLOATS, OK. TIH WITH A TOTAL OF 74 JTS PLUS 2 MARKER JTS (3,110.34') OF 5", 18#, HCP-110, STL LINER. FILLED PIPE ON THE FLY. CBU FROM 1,460' AT 2 1/2 BPM. TIH TO 3,110'.
	20:30	22:00	1.50	CASPRD1	24		P	12,300.0	PUMU HES' STANDARD MODEL VERSAFLEX LINER HANGER. MAKE UP 1 STAND DP. INSERTED RH RUBBER. CBU FROM 3,200' AT 2 1/2 BPM WHILE RD CASING TOOLS.
	22:00	6:00	8.00	CASPRD1	24		P	12,300.0	SIH WITH 5" LINER ON 4" DP. CBU, DISPLACING 12.9 WITH 12.6 MUD AT 2.5 BPM EACH 1,000' TO 2,000' INTERVALS.
2/20/2015	6:00	12:00	6.00	CASPRD1	24		P	12,300.0	FINISHED SIH WITH LINER ON 4" DP. CBU, DISPLACING 12.9 WITH 12.6 MUD AT 2.5 BPM EACH 1,300' INTERVAL. FULL RETURNS.
	12:00	15:30	3.50	CASPRD1	15		P	12,300.0	SPACED OUT. RU HES' SWIVEL & CMT HEAD. C & C 12.6 PPG MUD AT 2.5 BPM. 7,500 GAS UNITS MAX.

2.1 Operation Summary (Continued)

Date	Time Start-End		Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	15:00	18:00	3.00	CASPRD1	25		P	12,300.0	SWITCHED LINE TO CEMENTERS. HES TESTED P & L TO 9,550 PSI. M & P 20 BBLS 12.9 PPG TUNED SPACER III. M & P 235 SKS / 64 BBLS EXPANDACEM PREMIUM CEMENT AT 14.2 PPG WITH 1.52 YIELD. WASHED LINES. DROPPED DP DART. PUMPED 60 BBLS CLA-WEB / ALDACIDE PLUS 90 BBLS 12.6 PPG MUD. BUMPED PLUG WITH 2,200 PSI @ 17:50 HRS, 02/19/2015. BLED BACK 1.5 BBLS, FLOATS HELD. PACKED OFF THRICE, FULL RETURNS OVERALL.
	18:00	19:30	1.50	CASPRD1	24		P	12,300.0	RUPTURED DISC AT 5,300 PSI. RELEASED BALL. PUMPED 52 BBLS. PRESSURED TO 6,100PSI, EXPANDED HANGER. PULL TESTED LINER WITH 75K OVERPULL. SAT DOWN 75K, RELEASED SETTING TOOL FROM LINER HANGER. LANDED FS AT 12,298', FC AT 12,251', LC AT 12,207', TOL AT 9,188' WITH 213' OVERLAP. TOTAL LINER LENGTH: 3,110'. MARKER JT TOPS AT 10,290', 11,293'. DISPLACED MUD IN CSG ANNULUS, HAD 20 BBLS OF TUNED SPACER BACK PLUS 8 BBLS OF CEMENT.
	19:30	20:00	0.50	CASPRD1	31		P	12,300.0	POSITIVE TESTED LINER TOP TO 1,000 PSI FOR >10 MINUTES. DISPLACED MUD FROM DP & ANNULUS WITH 200 BBLS OF FRESH WATER FOLLOWED BY 320 BBLS FRESH WATER WITH 2% CLA-WEB/ALDACIDE WATER.
	20:30	22:00	1.50	CASPRD1	15		P	12,300.0	MONITOR WELL FOR FLOW 15 MINS, WELL STATIC. RD CMT LINES & HEAD.
	22:00	6:00	8.00	CASPRD1	14		P	12,300.0	LAID DOWN 4" DP. TIH WITH 33 STANDS DP FROM DERRICK. CONTINUED LD 4" DP.
2/21/2015	6:00	8:00	2.00	CASPRD1	14		P	12,300.0	REMOVED RH RUBBER. FINISHED LD 4" DP. LAID DOWN HES' LINER RUNNING TOOL.
	8:00	15:00	7.00	CASPRD1	29		P	12,300.0	PURGED ALL PLUMBING WITH AIR TO PREVENT FREEZING. CLEANED MUD TANKS WHILE ND 11" 10M BOPE & 11" 5M X 11"10M B-SECTION.
	15:00	19:00	4.00	CASPRD1	27		P	12,300.0	NU 11" 5M X 7-1/16" 10M TBG HEAD. NU FRAC VALVE & NIGHT CAP. TESTED HEAD TO 5,000 PSI FOR 15 MINS. OK.
	19:00	6:00	11.00	RDMO	02		P	12,300.0	RIG RELEASED 19:00 HRS, 02/20/2015. RIG DOWN.
2/22/2015	6:00	6:00	24.00	RDMO	02		P	12,300.0	RIGGED DOWN. 95% RIGGED DOWN. 50% MOVED OUT.

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CENTRAL DIVISION

ALTAMONT FIELD
FARNSWORTH 3-1C5
FARNSWORTH 3-1C5
COMPLETION LAND

Operation Summary Report

RECEIVED: Apr. 01, 2015

1 General

1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	FARNSWORTH 3-1C5		
Project	ALTAMONT FIELD	**Site**	FARNSWORTH 3-1C5
Rig Name/No.		**Event**	COMPLETION LAND
Start date	2/28/2015	**End date**	
Spud Date/Time	2/6/2015	**UWI**	FARNSWORTH 3-1C5
Active datum	KB @5,888.8ft (above Mean Sea Level)		
Afe No./Description	160741/53159 / FARNSWORTH 3-1C5		

2 Summary

2.1 Operation Summary

Date	Time Start	Time End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
2/28/2015	7:00	7:30	0.50	WLWORK	28		P		TGSM & JSA (WIRE LINE OPERATIONS)
	7:30	14:30	7.00	WLWORK	18		P		MIRU CUTTERS WIRE LINE UNIT RIH W/ 4.0 GR/JB/CCL TAG @ 12,192' WLM. RIH W/ GAMMA RAY/CBL/CCL RUN FROM PBTD TO 9 5/8" SHOE W/ 4000 PSIG RDMOL. SHUT FRAC VALVE INSTALL NIGHT CAP.
3/3/2015	6:00	7:30	1.50	WOR	28		P		TRAVEL TO THE COOK 4-13B3. HOLD SAFETY MEETING ON ROADING RIG ON SNOW PACKED ROADS. FILL OUT & REVIEW JSA
	7:30	11:00	3.50	WOR	01		P		MOVE RIG TO LOCATION & RIG UP
	11:00	12:00	1.00	WOR	16		P		NU BOP ON FRAC VALVE
	12:00	17:30	5.50	WOR	24		P		MEASURE & TIH W/ 4-1/8"OD BIT, BIT SUB, 100 JTS 2-3/8"EUE TBG, X-OVER & 198 JTS 2-7/8"EUE TBG. RU RIG PUMP & PUMP LINES. SDFN
3/4/2015	6:00	7:30	1.50	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON PICKING UP TBG. FILL OUT & REVIEW JSA
	7:30	8:30	1.00	WOR	24		P		PU79 JTS 2-7/8"EUE TBG. TAG FILL @ 12177' SLM.
	8:30	12:00	3.50	WOR	10		P		RU POWER SWIVEL. BREAK REVERSE CIRCULATION. CLEAN OUT TO LANDING COLLAR @ 12217' SLM. DISPLACE FLUID IN HOLE W/ 426 BBLS 2% KCL WTR. RD POWER SWIVEL
	12:00	18:00	6.00	WOR	24		P		TOOH LAYING DOWN 278 JTS 2-7/8"EUE TBG, X-OVER, 100 JTS 2-3/8"EUE TBG, BIT SUB & BIT
3/6/2015	6:00	8:00	2.00	STG01	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON PRESSURE TESTING CSG. FILL OUT & REVIEW JSA
	8:00	15:00	7.00	STG01	16		P		PRESSURE TEST CSG TO 9000 PSI FOR 30 MINUTES. TESTED GOOD. NU & TEST FRAC STACK.
3/7/2015	6:00	7:30	1.50	STG01	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON WIRELINE SAFETY. FILL OUT & REVIEW JSA
	7:30	12:00	4.50	STG01	21		P		RU WIRELINE EQUIPMENT. PERFORATE STAGE 1, 11644' TO 11983', USING 2-3/4" TITAN PERFECTA SDPGUNS, 16 GRAM CHARGES, 3 SPF & 120 DEGREE PHASING, WHILE HOLDING 1000 PSI ON CSG. PRESSURE DROPPED FROM 1000 PSI TO 900 PSI WHILE PERFORATING. POOH W/ PERF GUN. SDFN
3/10/2015	6:00	7:30	1.50	STG01	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON FRAC SAFETY. FILL OUT & REVIEW JSA

2.1 Operation Summary (Continued)

Date	Time Start-End		Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	7:30	9:30	2.00	STG01	16		P		CONTINUE RIGGING UP FRAC EQUIPMENT
	9:30	11:00	1.50	STG01	35		P		PRESSURE TEST LINES TO 9744 PSI. OPEN WELL. SICP 190 PSI. BREAK DOWN STAGE 1 PERFORATIONS @ 5486 PSI, PUMPING 5 BPM. BRING RATE UPTO 36 BPM. PUMP 86 TTL BBLS FLUID THEN PERFORM STEP RATE SHUT DOWN. ISIP 4327 PSI. FG .79. 5 MIN 4181 PSI. 10 MIN 4134 PSI. . TREAT STAGE 1 PERFORATIONS W/ 5000 GALLONS HCL ACID, 3000LBS 100 MESH SAND IN 1/2 PPG STAGE & 150,010 LBS THS 30/50 SAND IN 1/2 PPG, 1 PPG, 2 PPG & 3 PPG STAGES. ISIP 4724 PSI. FG .83. AVG RATE 76.2 BPM. MAX RATE 79.8 BPM. AVG PSI 5672 PSI. MAX PSI 7780 PSI. TURN WELL OVER TO WIRE LINE. 3767 BBLS FLUID TO RECOVER.
	11:00	12:30	1.50	STG02	21		P		SET CIBP @ 11581'. PERFORATE STAGE 2, 11,228' TO 11,566', USING 2-3/4" TITAN PERFECTA SDP GUNS, 16 GRAM CHARGES, 3 SPF & 120 DEGREE PHASING.PRESSURE DROPPED FROM 4,400 PSI TO 4,300 PSI WHILE PERFORATING. TURN WELL OVER TO FRAC CREW
	12:30	14:15	1.75	STG02	35		P		PRESSURE TEST LINES TO 8774 PSI. OPEN WELL. SICP 3433 PSI. BREAK DOWN STAGE 2 PERFORATIONS @ 4163 PSI, PUMPING 10 BPM. BRING RATE UPTO 35 BPM. PUMP 81 TTL BBLS FLUID THEN PERFORM STEP RATE SHUT DOWN. ISIP 4,098 PSI. FG .78. 5 MIN 3945 PSI. 10 MIN 3832 PSI. . TREAT STAGE 2 PERFORATIONS W/ 5000 GALLONS HCL ACID, 3000LBS 100 MESH SAND IN 1/2 PPG STAGE & 150,100 LBS THS 30/50 SAND IN 1/2 PPG, 1 PPG, 2 PPG & 3 PPG STAGES. ISIP 4581 PSI. FG .83. AVG RATE 76.3 BPM. MAX RATE 78.8 BPM. AVG PSI 5084 PSI. MAX PSI 7989 PSI. TURN WELL OVER TO WIRE LINE. 3932 BBLS FLUID TO RECOVER.
	14:15	16:00	1.75	STG03	21		P		SET CIBP @ 11,199'. PERFORATE STAGE 3, 10,879.5' TO 11184', USING 2-3/4" TITAN PERFECTA SDP GUNS, 16 GRAM CHARGES, 3 SPF & 120 DEGREE PHASING.PRESSURE DROPPED FROM 4,100 PSI TO 3,800 PSI WHILE PERFORATING. TURN WELL OVER TO FRAC CREW
	16:00	17:30	1.50	STG03	35		P		PRESSURE TEST LINES TO 8774 PSI. OPEN WELL. SICP 3433 PSI. BREAK DOWN STAGE 3 PERFORATIONS @ 4163 PSI, PUMPING 10 BPM. BRING RATE UPTO 35 BPM. PUMP 77 TTL BBLS FLUID THEN PERFORM STEP RATE SHUT DOWN. ISIP 4392 PSI. FG .83. 5 MIN 3945 PSI. 10 MIN 3832 PSI. . TREAT STAGE 3 PERFORATIONS W/ 5000 GALLONS HCL ACID, 3000LBS 100 MESH SAND IN 1/2 PPG STAGE & 150,200 LBS THS 30/50 SAND IN 1/2 PPG, 1 PPG, 2 PPG & 3 PPG STAGES. ISIP 4471 PSI. FG .83. AVG RATE 70.2 BPM. MAX RATE 79.9 BPM. AVG PSI 5315 PSI. MAX PSI 7085 PSI. TURN WELL OVER TO WIRE LINE. 3776 BBLS FLUID TO RECOVER.
	17:30	19:30	2.00	STG04	21		P		SET CIBP @ 10,862'. PERFORATE STAGE 4, 10585' TO 10847', USING 2-3/4" TITAN PERFECTA SDP GUNS, 16 GRAM CHARGES, 3 SPF & 120 DEGREE PHASING.PRESSURE DROPPED FROM 4,300 PSI TO 4,100 PSI WHILE PERFORATING. SHUT WELL IN SHUTTING ALL VALVES ON FRAC STACK W/ OUT SIDE VALVES NIGHT CAPPED
3/11/2015	6:00	6:30	0.50	STG04	28		P		HOLD SAFETY MEETING ON FRAC SAFETY. FILL OUT & REVIEW JSA

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	6:30 8:00	1.50	STG04	35		P		PRESSURE TEST LINES TO 8312 PSI. OPEN WELL. SICP 3945 PSI. BREAK DOWN STAGE 4 PERFORATIONS @ 5642 PSI, PUMPING 5.5 BPM. BRING RATE UPTO 34 BPM. PUMP 85 TTL BBLS FLUID THEN PERFORM STEP RATE SHUT DOWN. ISIP 6927 PSI. FG .80. 5 MIN 3809 PSI. 10 MIN 3691 PSI. TREAT STAGE 4 PERFORATIONS W/ 5000 GALLONS HCL ACID, 3000LBS 100 MESH SAND IN 1/2 PPG STAGE & 151,190 LBS TLC 30/50 SAND IN 1/2 PPG, 1 PPG, 2 PPG & 3 PPG STAGES. ISIP 4628 PSI. FG .87. AVG RATE 73.9 BPM. MAX RATE 83 BPM. AVG PSI 5358 PSI. MAX PSI 7414 PSI. TURN WELL OVER TO WIRE LINE. 37526 BBLS FLUID TO RECOVER.
	8:00 9:30	1.50	STG05	21		P		SET CIBP @ 10,568'. PERFORATE STAGE 5, 10,284' TO 10,553', USING 2-3/4" TITAN PERFECTA SDP GUNS, 16 GRAM CHARGES, 3 SPF & 120 DEGREE PHASING.PRESSURE DROPPED FROM 4300 PSI TO 4100 PSI WHILE PERFORATING. TURN WELL OVER TO FRAC CREW
	9:30 11:15	1.75	STG05	35		P		PRESSURE TEST LINES TO 8312 PSI. OPEN WELL. SICP 3945 PSI. BREAK DOWN STAGE 5 PERFORATIONS @ 4781 PSI, PUMPING 5.5 BPM. BRING RATE UPTO 31 BPM. PUMP 85 TTL BBLS FLUID THEN PERFORM STEP RATE SHUT DOWN. ISIP 6927 PSI. FG .80. 5 MIN 3809 PSI. 10 MIN 3691 PSI. TREAT STAGE 5 PERFORATIONS W/ 5000 GALLONS HCL ACID, 3000LBS 100 MESH SAND IN 1/2 PPG STAGE & 150,040 LBS TLC 30/50 SAND IN 1/2 PPG, 1 PPG, 2 PPG & 3 PPG STAGES. ISIP 4685 PSI. FG .88. AVG RATE 74 BPM. MAX RATE 84.2 BPM. AVG PSI 5180 PSI. MAX PSI 7623 PSI. TURN WELL OVER TO WIRE LINE. 3765 BBLS FLUID TO RECOVER.
	11:15 12:45	1.50	STG06	21		P		SET CIBP @ 10,271'. PERFORATE STAGE 6, 9,976' TO 10,256', USING 2-3/4" TITAN PERFECTA SDP GUNS, 16 GRAM CHARGES, 3 SPF & 120 DEGREE PHASING.PRESSURE CLIMBED FROM 3600 PSI TO 3700 PSI WHILE PERFORATING. TURN WELL OVER TO FRAC CREW
	12:45 14:30	1.75	STG06	35		P		PRESSURE TEST LINES TO 8192 PSI. OPEN WELL. SICP 3279 PSI. BREAK DOWN STAGE 6 PERFORATIONS @ 5811 PSI, PUMPING 5 BPM. BRING RATE UPTO 33 BPM. PUMP 75 TTL BBLS FLUID THEN PERFORM STEP RATE SHUT DOWN. ISIP 3870 PSI. FG .81. 5 MIN 3705 PSI. 10 MIN 3623 PSI. TREAT STAGE 6 PERFORATIONS W/ 5000 GALLONS HCL ACID, 3000LBS 100 MESH SAND IN 1/2 PPG STAGE & 150,010 LBS TLC 30/50 SAND IN 1/2 PPG, 1 PPG, 2 PPG & 3 PPG STAGES. ISIP 4241 PSI. FG .88. AVG RATE 74 BPM. MAX RATE 84.2 BPM. AVG PSI 5180 PSI. MAX PSI 7623 PSI. TURN WELL OVER TO WIRE LINE. 3765 BBLS FLUID TO RECOVER.
	14:30 16:00	1.50	STG07	21		P		SET CIBP @ 9,960'. PERFORATE STAGE 7, 9,,666' TO 9,945', USING 2-3/4" TITAN PERFECTA SDP GUNS, 16 GRAM CHARGES, 3 SPF & 120 DEGREE PHASING.PRESSURE STAYED @ 3800 PSI WHILE PERFORATING. TURN WELL OVER TO FRAC CREW

2.1 Operation Summary (Continued)

Date	Time Start-End		Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	16:00	17:30	1.50	STG07	35		P		PRESSURE TEST LINES TO 8432 PSI. OPEN WELL. SICP 3658 PSI. BREAK DOWN STAGE 7 PERFORATIONS @ 4334 PSI, PUMPING 7 BPM. BRING RATE UPTO 31 BPM. PUMP 66 TTL BBLS FLUID THEN PERFORM STEP RATE SHUT DOWN. ISIP 3705 PSI. FG .81. 5 MIN 3594 PSI. 10 MIN 3583 PSI. TREAT STAGE 7 PERFORATIONS W/ 5000 GALLONS HCL ACID, 3000LBS 100 MESH SAND IN 1/2 PPG STAGE & 150,025 LBS TLC 30/50 SAND IN 1/2 PPG, 1 PPG, 2 PPG & 3 PPG STAGES. ISIP 4206 PSI. FG .86. AVG RATE 72.9 BPM. MAX RATE 77.4 BPM. AVG PSI 4620 PSI. MAX PSI 5876 PSI. TURN WELL OVER TO WIRE LINE. 3759 BBLS FLUID TO RECOVER.
	17:30	19:30	2.00	STG08	21		P		SET CIBP @ 9648'. PERFORATE STAGE 8, 9388' TO 9633', USING 2-3/4" TITAN PERFECTA SDP GUNS, 16 GRAM CHARGES, 3 SPF & 120 DEGREE PHASING.PRESSURE DROPPED FROM 3600 PSI TO 2800 PSI WHILE PERFORATING. SHUT WELL IN SHUTTING ALL VALVES ON FRAC STACK W/ OUT SIDE VALVES NIGHT CAPPED. RD WIRELINE EQUIPMENT
3/12/2015	6:00	8:30	2.50	STG08	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON FRAC SAFETY.FILL OUT & REVIEW JSA
	8:30	10:00	1.50	STG08	35		P		PRESSURE TEST LINES TO 8966 PSI. OPEN WELL. SICP 2265 PSI. BREAK DOWN STAGE 8 PERFORATIONS @ 3161 PSI, PUMPING 10 BPM. BRING RATE UPTO 31 BPM. PUMP 69 TTL BBLS FLUID THEN PERFORM STEP RATE SHUT DOWN. ISIP 2779 PSI. FG .72. 5 MIN 2414 PSI. 10 MIN 2164 PSI. 15 MIN 2106. TREAT STAGE 8 PERFORATIONS W/ 5000 GALLONS HCL ACID, 3000LBS 100 MESH SAND IN 1/2 PPG STAGE & 150,025 LBS TLC 30/50 SAND IN 1/2 PPG, 1 PPG, 2 PPG & 3 PPG SLICK WATER STAGES. ISIP 4002 PSI. FG .85. AVG RATE 75.9 BPM. MAX RATE 77.4 BPM. AVG PSI 4004 PSI. MAX PSI 5153 PSI. 3759 BBLS FLUID TO RECOVER.
	10:00	13:00	3.00	RDMO	02		P		RD FRAC EQUIPMENT
	13:00	0:00	11.00	CTU	16		P		MOVE CTS COIL TBG EQUIPMENT TO LOCATION & PARTIALLY RIG UP
3/13/2015	6:00	7:00	1.00	CTU	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON COIL TBG SAFETY. FILL OUT & REVIEW JSA
	7:00	16:30	9.50	CTU	10		P		MU COIL CONNECTOR & PULL TEST TO 35K. MU & FUNCTION TEST MOTOR ASSEMBLY. RIH & DRILL CBP'S. CLEAN OUT TO PBTD 12226'. CIRCULATE CLEAN. POOH TO LINER TOP. CIRCULATE 1 HR WHILE WORKING IN & OUT OF LINER. POOH W/ COIL TBG & TOOLS.
	16:30	18:00	1.50	CTU	02		P		BREAK OUT TOOLS. BLOW COIL DRY. RD COIL TBG UNIT
	18:00	6:00	12.00	FB	19		P		OPEN WELL TO FLOW BACK TANK. 2800 PSI ON A 12/64" CHOKE. RECOVERED 424 BBLS WTR. FLOWING PRESSURE @ REPORT TIME 3475 PSI
3/14/2015	6:00	6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON FLOW BACK OPERATIONS. FILL OUT & REVIEW JSA
	6:30	6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 650 MCF GAS, 330 BBLS OIL & 434 BBLS WTR FLOWING @ 3350 PSI ON A 12/64" CHOKE
3/15/2015	6:00	6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON FLOW BACK OPERATIONS. FILL OUT & REVIEW JSA
	6:30	6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 1056 MCF GAS, 518 BBLS OIL & 264 BBLS WTR FLOWING @ 3250 PSI ON A 12/64" CHOKE
3/16/2015	6:00	6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON FLOWBACK OPERATIONS. FILL OUT & REVIEW JSA

RECEIVED: Apr. 01, 2015

2.1 Operation Summary (Continued)

Date	Time Start-End		Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	6:30	6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 1101 MCF GAS, 526 BBLS OIL & 189 BBLS WTR FLOWING @ 3225 PSI ON A 12/64" CHOKE
3/17/2015	6:00	7:30	1.50	INSTUB	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON WIRELINE SAFETY. FILL OUT & REVIEW JSA
	7:30	10:00	2.50	INSTUB	27		P		RU WIRELINE UNIT. RIH & SET PKR @ 9270'. POOH W/ SETTING TOOL & RD WIRELINE UNIT.
	10:00	12:00	2.00	INSTUB	16		P		ND FRAC STACK TO MANUAL FRAC VALVE. NU BOP ON TOP OF FRAC VALVE
	12:00	15:00	3.00	INSTUB	01		P		RU RIG WHILE BLEEDING PRESSURE OFF WELL. PUMP 20 BBLS 2% KCL WTR DOWN CSG.
	15:00	17:30	2.50	INSTUB	24		P		TIH W/ ON / OFF SKIRT, 5 JTS 2-3/8" EUE TBG, X-OVER & 222 JTS 2-7/8" EUE TBG. SDFN
3/18/2015	6:00	7:30	1.50	INSTUB	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON PICKING UP TBG. FILL OUT & REVIEW JSA
	7:30	8:30	1.00	INSTUB	24		P		PU 58 JTS 2-7/8"EUE TBG. TAG PKR @ 9289' SLM. MEASURE SPACE OUT. RELEASE ON/OFF TOOLLD 1 JT TBG.
	8:30	11:00	2.50	INSTUB	06		P		CIRCULATE PKR FLUID
	11:00	15:00	4.00	INSTUB	16		P		LAND TBG W/ 6' PUP JT BELOW TBG HANGER & BACK PRESSURE VALVE INSTALLED IN TBG HANGER. ND BOP & FRAC VALVE. REMOVE BACK PRESSURE VALVE. LD PUP JT. LAND TBG IN 15K TENSION. INSTALL BACK PRESSURE VALVE IN TBG HANGER. NU WELL HEAD & PLUMB FLOWLINE. PRESSURE TEST WELL HEAD VOID TO 5000 PSI. TESTED GOOD. TEST ANNULUS TO 2000 PSI FOR 15 MINUTES. TESTED GOOD. PRESSURE TEST FLOW LINES TO 4500 PSI. PUMP OUT PLUG @ 3800 PSI. OPEN WELL TO TREATER.
	15:00	6:00	15.00	FB	19		P		FLOW WELL TO PRODUCTION FACILITY.
3/19/2015	6:00	6:30	0.50	FB	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON FLOWBACK OPERATIONS. FILL OUT @ REVIEW JSA
	6:30	6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 1146 MCF GAS, 818 BBLS OIL (251 BBLS FROM FLOWBACK TANK), & 182 BBLS WTR FLOWING @ 3220 PSI ON A 1264" CHOKE
3/20/2015	6:00	6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON FLOW BACK OPERATIONS. FILL OUT & REVIEW JSA
	6:30	6:30	0.00	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 1243 MCF GAS, 645 BBLS OIL & 238 BBLS WTR FLOWING @ 3070 PSI ON A 14/64" CHOKE.
3/21/2015	6:00	6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON FLOW BACK OPERATIONS. FILL OUT & REVIEW JSA
	6:30	6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 1298 MCF GAS, 691 BBLS OIL & 212 BBS WTR FLOWING @ 2974 PSI ON A 14/64" CHOKE
3/22/2015	6:00	6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON FLOW BACK OPERATIONS. FILL OUT & REVIEW JSA
	6:30	6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 1246 MCF GAS, 780 BBLS WTR & 277 BBLS WTR, FLOWING @ 2816 PSI ON A 16/64" CHOKE
3/23/2015	6:00	6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON FLOW BACK OPERATIONS. FILL OUT & REVIEW JSA
	6:30	6:00	23.50	FB	19		P		FLOW WELL TO PRODUCCION FACILITY. RECOVERED 1526 MCF GAS, 795 BBLS OIL & 263 BBLS WTR FLOWING @ 2716 PSI ON A 16/64" CHOKE

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